ø30 Switches and Pilot Lights

TWN TWND Series



Heavy duty switches & pilot lights offer both variety and reliability.











- Pilot light is not approved by EN standards.
- DC-DC convertor unit is not approved by standards.
- See website for details on approvals and standards.



 Model	Features	Page
Plastic TWN Series	The all-time bestseller since first developed. Suitable for versatile applications.	B-304
Diecast Zinc TWND Series	Heavy-duty switches for tough industrial usage.	B-326

Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof**

Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator

Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature Pilot Lights

ARN CS

ø30 TWN/TWND Selection Guide

Function	Pushbutton							
Cotogoni	Flu	sh	Exte	nded	Extended wit	h Half Shroud		
Category	Momentary,	/Maintained	Momentary	/Maintained	Momentary	/Maintained		
				Diecast Zinc		Diecast Zinc		
Shape		6						
Madal	ABN1	ABD1	ABN2	ABD2	ABN2G	ABGD2		
Model	AON1	AOD1	AON2	AOD2	AON2G	AOGD2		
Page	B-310	B-326	B-310	B-326	B-310	B-326		

Function		Pushbutton							
Catamani	Extended wit	h Full Shroud	Mush	nroom	Mushroom wi	th Full Shroud			
Category	Momentary.	/Maintained	Momentary	/Maintained	Momentary	/Maintained			
	_	Diecast Zinc		Diecast Zinc		Diecast Zinc			
Shape									
Model	ABN2F	ABFD2	ABN3	ABD3	ABN3G	ABGD3			
iviodel	AON2F	AOFD2	AON3	AOD3	_	AOGD3			
Page	B-310	B-326	B-311	B-327	B-311	B-327			

Function	Pushbutton							
Cotogony	Jumbo N	lushroom	Jumbo Mushroom v	with Shallow Shroud	Jumbo Mushroom	with Deep Shroud		
Category	Mom	entary	Momo	entary	Mom	entary		
		Diecast Zinc		Diecast Zinc		Diecast Zinc		
Shape								
Model	ABN4	ABD4	ABN4G	ABGD4	ABN4F	ABFD4		
Page	B-311	B-327	B-311	B-327	B-311	B-327		

Function		Pushbutton								
Category	Mushroom Pushlo	ock Turn Reset (*1)	Mushroom P	ush Turn Lock	Mushro	oom Pull				
Shape		Diecast Zinc		Diecast Zinc	6	Diecast Zinc				
Model	AVN3	AVD3	AJN3	AJD3	AZN3	AZD3				
Page	B-312	B-328	B-312	B-328	B-312	B-328				

Function	Pushbutton						
Category	Mushroom	Push-Pull	Pin I	_ock			
Shape	_	Diecast Zinc	_	Diecast Zinc			
Model	_	AYD3	_	ABD8P			
Page	_	B-328	_	B-327			

^{*1)} Cannot be used as emergency stop switch based on ISO 13850 and IEC 60947-5-5.

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Terminal Blocks

ø30 TWN/TWND Selection Guide

Function		LED Illuminated Pushbutton						
Catagory	Exte	nded	Extended wit	h Half Shroud	Extended wit	h Full Shroud		
Category	Momentary	/Maintained	Momentary	/Maintained	Momentary	/Maintained		
	_	Diecast Zinc	_	Diecast Zinc	_	Diecast Zinc		
Shape				_				
Madal	ALN2	ALD2	ALGN2		ALFN2	ALFD2		
Model	AOLN2	AOLD2	AOLGN2	_	AOLFN2	A0LFD2		
Page	B-313	B-329	B-313		B-313	B-329		

Function	LED Illuminated Pushbutton							
Category	Mushroom Momentary/Maintained		Mushroom Momentary/Maintained Mushroom Pushlock Turn Reset (*1)		Mushroom P	ush Turn Lock		
Shape		Diecast Zinc	6	Diecast Zinc		Diecast Zinc —		
Model	ALN3 AOLN3	ALD3 AOLD3	AVLN3	AVLD3	AJLN3	_		
Page	B-313	B-330	B-314	B-330	B-313			

Function		Selector Switches							
Category	Kr	nob	Le	ver	K	ey			
Shape		Diecast Zinc		Diecast Zinc		Diecast Zinc			
Model	ASN	ASD	ASN□L	ASD□L	ASN□K	ASD□K			
Page	B-316	B-331	B-317	B-332	B-318	B-333			

Function		Selector Switch			ushbutton
Category	Key	LED Illumi	nated Knob	Ring Op	perator
Shape			Diecast Zinc		Diecast Zinc
Model	ASN□K-N024401	ASLN	ASLD	ASBN2	ASBD2
Page	B-319	B-320 B-334		B-323	B-335

Function	LED Illuminated Pilot Light							
Category		Dome	Square Extended (IP40)	Rectangular (Marking) (IP40)				
Shape		Diecast Zinc						
Model	APN1	APD1	UPQN3B	UPQN4				
Page	B-324	B-336	B-324	B-324				

 $^{^{\}star}$ 1) Cannot be used as emergency stop switch based on ISO 13850 and IEC 60947-5-5.

Ø30 TWN/TWND Ratings/Specifications

Heavy duty switches & pilot lights offer both variety and reliability. **Endures harsh environments.**

Equipped with HW-U contact blocks featuring finger-safe (IP20) structure and spring-up terminals.

ø30 TWN Series (plastic)

Contact ratings

Pushbuttons Illuminated Pushbuttons

Selector Switches

Operating Voltage

Operating Voltage

Operating

Current

Selector Pushbuttons

Illuminated Selector Switches

Ratings and Specifications

Contact ratings by utilization category

HW-U10 (NO contact), HW-U01 (NC contact)

50/60 Hz

50/60 Hz

DC

DC



ø30 TWND Series (Diecast Zinc)

600V

10A

AC-15 (A600)

24V

10A

10A

10A

5A

24V

5A

5A

5A

2.5A

48V

5A

2A

48V

_

2.5A

1A



110V

10A

5A

2.2A

1.1A

110V

5A

2.5A

1.1A

0.55A

50V

10A

7A

50V

5A

3.5A

220V

6A

ЗА

1.1A

0.6A

220V

ЗА

1.5A

0.55A

0.3A

440V

2A

1A

440V

1A

0.5A

APEM

Control Boxes

Emergency Stop Switches Enabling

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Switches

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Terminal Blocks Relays & Sockets

Circuit Protectors

Power Supplies

LED Illumination

Controllers

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Miniature

Pilot Lights

DC-13 Control of electromagnets • The operating current represents the classification by making and breaking currents (IEC 60947-5-1).

DC-13 Control of electromagnets

HW-U10R (EM contact/NO contact), HW-U01R (LB contact/NC contact)

Rated insulation voltage

Rated continuous current

JIS C8201-5-1

IEC60947-5-1

Contact ratings by utilization category

AC-12 Control of resistive loads and solid state loads

DC-12 Control of resistive loads and solid state loads

AC-12 Control of resistive loads and solid state loads

DC-12 Control of resistive loads and solid state loads

AC-15 Control of electromagnetic loads (> 72 VA)

AC-15 Control of electromagnetic loads (> 72 VA)

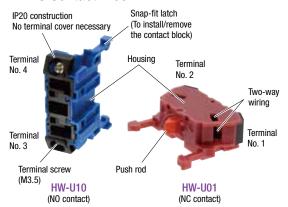
Operating

Current

. Minimum applicable load: 3V AC/DC, 5 mA (applicable range may vary with operating conditions and load types)

• For mono-lever switches and cam switches, see the brochures of each product.

HW-U Contact Block



Part No.	HW-U10	HW-U01	HW-U10R	HW-U01R		
Contact	_/_	7	_/_	7		
Contact	1NO	1NC	EM (NO) (early make)	LB (NC) (late break)		
Terminal No.	3-4	1-2	3-4	1-2		
Housing color	Blue	Reddish purple	Blue	Reddish purple		
Push Rod color	Green	Red	Black	White		
Weight	Approx. 11g					

- Up to 4 contacts in two decks can be mounted onto each operator. (AZN, AZD, AYD: Up to 2 contact blocks in one deck)
- · Cannot be used on operators in dark gray or light gray color.
- · Gold contact available (gold-plated silver)

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Explosion Proof

Terminal Blocks Relays & Sockets

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LED Illuminated Part Specifications

Unit					LED I	amp
UIIIL	Rated Voltage		Operating Vo	ltage	Lamp Base	Part No.
	6V AC/DC		6V AC/DC			LSRD-6
	12V AC/DC		12V AC/DC			LSRD-1
	24V AC/DC		24V AC/DC			LSRD-2
	100/110V AC		100/110V AC			
	115/120V AC (*1)		115/120V AC (*1)	. 100/		
Illuminated pushbutton	120V AC (*2)		120V AC (*2)			
Illuminated selector switch	200/220V AC		200/220V AC	±10%	BA9S/13	
Pilot light	230/240V AC (*1)	50/60 Hz	230/240V AC (*1)			LSRD-6
	240V AC (*2)		240V AC (*2)			LSND-0
	380V AC		380V AC			
	400/440V AC		400/440V AC			
	480V AC		480V AC			
	110V DC		90 to 140V DC			

Illuminated Part Type and Shape

		Illuminate	d Unit			Pilot	Light
Power Unit	Full voltage adapter	Transfo	ormer	DC-DC converter	Full voltage adapter (unibody)	Transformer	DC-DC converter
Rated Voltage	6V, 12V, 24V AC/DC	100 to 240V AC	380V AC min.	110V DC	6V, 12V, 24V AC/DC	100 to 480V AC	110V DC
Polarity	None	None	None	X1 (+) X2 (-)	None	None	X1 (+) X2 (–)
Shape/Terminal	X1 X2	X1 X2		X1 X2	(APN1)		X1 X2

[•] Note the polarity for wiring when connecting to DC-DC converter unit.

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_amp Ratings	(LSRD)	
_	LCDD C	1.0

LED Lam	p Ratings	(LSRD)	X2	
Part No.		LSRD-6	LSRD-1	LSRD-2
Lamp Base		BA9S/13		
Rated Voltage	e	6V AC/DC	12V AC/DC	24V AC/DC
Voltage Rang	je	6V AC/DC ±10%	12V AC/DC ±10%	24V AC/DC ±10%
Current	DC	10mA	7mA	7mA
Draw	AC	14mA	8mA	8mA
Voltage Mark	king	Die stamped on the base		
Life (reference	ce value)	Approx. 50,000 hours (The luminance is reduced to 50% the initial	intensity when used on complete DC at 25°C.)	
Internal Circu	uit	X1 — Noise	d current circuit protection circuit ier circuit er protection circuit	Example: LSRD-2
Weight		Approx. 2g		

[•] Only one color is available for LSRD so there are no codes to specify the color in the part no.

See LED lamps, see LED Lamp Ratings below.
 *1) Illuminated pushbutton, illuminated selector switch

^{*2)} Pilot light

Specifications

Specifications			Non-illuminated: –25 to +	70°C (no freezing)	& Pilot Lights	
Operating Temperature			Illuminated: -25 to +50°C		ilot	
Storage Temperature			-40 to +80°C (no freezing			
Operating Humidity			45 to 85% RH (no condens	sation)	ght	
Contact Resistance			50 mΩ maximum (initial va	6 6		
Insulation Resistance			100 MΩ minimum (500V E	DC megger)		
Dielectric Strength			Between live and dead me (Full voltage and pilot light 2000V AC, (pilot lights: 6V		АРЕМ	
Vibration Resistance	Damage limits		30 Hz, amplitude 1.5 mm		Switches & Pilot Lights	
VIDIALIOII RESISTATICE	Operation extremes		5 to 55 Hz, amplitude 0.5	mm		
Shock Resistance	Damage limits		1000 m/s ²		Control Boxes	
SHOCK RESISTANCE	Operation extremes		100 m/s ²		Emergency Stop Switches	
		Momentary	5,000,000		Enabling	
	Pushbutton	Maintained	500,000 (over 3 contacts:	250,000)	Switches	
	Pushbutton	Push lock turn reset	500,000		Safety Products	
Mechanical Life (minimum operations)		Pull	500,000		- Saisty Froducto	
Mechanical Life	We will a stand on the last and	Momentary	2,500,000		Explosion Proof	
(minimum operations)	Illuminated pushbutton	Maintained	500,000 (over 3 contacts:	250,000)	Tarminal Disaks	
	Selector switch		500,000	·	Terminal Blocks	
	Key selector switch		500,000		Relays & Sockets	
Selector su Key select Illuminated Selector pu	Illuminated selector switch		500,000	500,000		
	Selector pushbutton		250,000		Circuit Protectors	
	·	Momentary	500,000 Switching frequ	uency 1800 operations/h, duty ratio 40%	Power Supplies	
	Pushbutton	Maintained	500,000 (over 3 contacts:		LED Illumination	
		Push lock turn reset		uency 900 operations/h, duty ratio 40%		
		Momentary		uency 1800 operations/h, duty ratio 40%	Controllers	
Electrical Life (minimum operations) (*1)	Illuminated pushbutton	Maintained	500,000 (over 3 contacts:		Operator Interfaces	
	Selector switch	<u>'</u>		uency 1200 operations/h, duty ratio 40%	Sensors	
	Key selector switch			uency 1200 operations/h, duty ratio 40%	<u> </u>	
	Illuminated selector switch	ch		uency 1200 operations/h, duty ratio 40%	AUTO-ID	
	Selector pushbutton	·		uency 900 operations/h, duty ratio 40%		
	·	Pushbutton	ABN122: 82g	ABN322: 87g		
		Illuminated pushbutton	ALN22222DN: 106g	ALN21622DN: 163g		
	TWN series	Selector switch	ASN222N: 83g	ASN2K22N: 120q	Flush Silhouette	
		Illuminated selector switch	ASLN22222DN: 106g	ASLN21622DN: 163q		
		Pilot light	APN122DN: 46g	APN116DN: 125q	ø16	
Weight (approx.)		Pushbutton	ABD122: 108g	ABD322: 113g		
		Illuminated pushbutton	ALD22222DN: 132g	ALD21622DN: 189g		
	TWND series	Selector switch	ASD222N: 110g	ASD2K22N: 147q	ø30	
		Illuminated selector switch	ASLD22222DN: 133g	ASLD21622DN: 190g	Miniature	
		Pilot light	APD122DN: 75g	APD116DN: 152g	- Williature	
(1) I and nondition 000\/ AC (24 (42 45)	,otgiit	2 /LLDIN / 09		Pilot Lights	

^{*1)} Load condition 220V AC 3A (AC-15)

Degree of Protection

Series	Unit	Model	IEC 60529	JIS C 0920	
	Pushbutton	ABN, AON, AVN			
	Illuminated pushbutton	ALN, AOLN, AVLN			
	Selector switch	ASN, ASN□L			
TWN corios	Key selector switch	ASN□K	IP65	Dust-proof/jet-proof	
TWN series	Illuminated selector switch	ASLN			
	Selector pushbutton	ASBN			
	Round pilot light	APN			
	Square pilot light	UPQN	IP40	_	
	Pushbutton	ABD, AOD, AVD			
	Illuminated pushbutton	ALD, AOLD, AVLD			
TAME :	Selector switch	ASD, ASD□L			
TWND series Diecast zinc	Key selector switch	ASD□K	IP65	Dustproof/jet-proof	
Diecast zinc	Illuminated selector switch	ASLD			
	Selector pushbutton	ASBD			
	Round pilot light	APD			

[•] Switches/pilot lights have been tested in a test room in accordance with the degree of protection standards, by installing on an enclosure to valuate the effect on the enclosure or inside the switch or pilot light.

For harsh environment such as torrid/frigid area

TWN/TWND series for harsh environment such as tropical/frigid area is also available (not approved by standards). Contact IDEC for details.

▶ Download catalogs and CAD from http://asia.idec.com/downloads

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Control Boxes

Stop Switches

Explosion Proof Terminal Blocks

Relays & Sockets

Power Supplies

LED Illumination

Controllers

Operator

Sensors

AUTO-ID

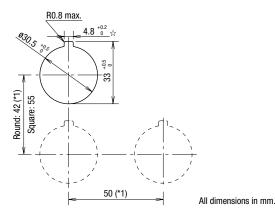
Interfaces

Circuit Protectors

Emergency

Enabling Switches Safety Products

Mounting Hole Layout/Mounting Centers



- The minimum mounting centers are applicable to pilot lights with one layer of contact blocks (one to two contact blocks). When two layers of contact blocks (four contact blocks) are mounted, determine the minimum mounting centers in consideration of convenience for wiring.
- *1) Mushroom with shroud: 50 mm minimum
- *1) Jumbo mushroom: 67 mm minimum
- *1) Jumbo mushroom with shroud: 77 mm minimum

When high temperature is expected, take necessary measures such as

securing sufficient mounting centers or using a cooling fan.

• The 4.8 $^{+0.2}_{-0}$ mm recess is for preventing rotation and is not necessary when the nameplate or anti-rotation ring is not used.

Note: For mounting hole layout of mono-lever switches and cam switches, see IDEC's website.

Notes for Ordering

Standard models

- Specify Ordering No. when ordering.
- Specify a color code in place of *
- Pilot lights, illuminated pushbuttons, and illuminated selector switches have an LED lamp installed.
- Pilot lights are equipped with a terminal cover.
- Color codes for units without LED lamps:

R (red), G (green), A (amber), Y (yellow), S (blue)

When using a commercially available lamp, choose a lamp with rated voltage 5 to 30V AC/DC and 1W maximum, and with the same base and shape. Make sure of correct operation before installation. The operation of TWN/TWND series cannot be guaranteed when a commercially available lamp is used.

- · Terminal covers, nameplates, and accessories for mono-lever swictch and cam switch are ordered separately.
- For terminal cover, nameplate and other accessories of mono-lever switches and cam switches, see IDEC's website.

Ordering Information

Pushbutton Flush Silhouette ø16

When specifying gold-plated silver contact and contact configuration:

① Optional contact

2 Contact configuration

ø22 TWN series (B-310 to B-312)

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Miniature

Pilot Lights

TWND series (B-326 to B-328)

ABN 2 11 R - MAU

ABD 2 11 NR - MAU ① Optional contact ② Contact configuration <Codes>

① Optional contact

MAU: Gold-plated silver

2 Contact configuration

10: 1NO

01: 1NC

11: 1NO1NC

20: 2N0 02: 2NC

2N02NC 22:

40: 4N0

04: 4NC

1N03NC 13:

31: 3N01NC

30: 3N0

3NC 03:

12: 1N02NC

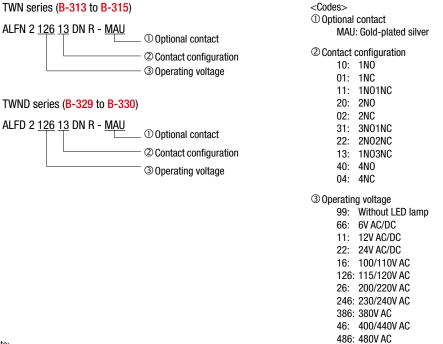
2N01NC

- Pushbutton with one or three contact blocks contains a dummy block.
- Mushroom pull pushbuttons AZN, AZD and mushroom push-pull AYD have up to two contacts in one layer.

Ordering Information

Illuminated Pushbutton

When specifying gold-plated silver contact, contact configuration, and LED operating voltage:



Note

- Odd number of contact blocks, such as 1NO, 1NC, 3NO, 2NO-1NC, 1NO-2NC, and 3NC, are not available for models of 100V AC or over.
- Illuminated pushbuttons of 24V AC/DC and below with two or four contact blocks contain a dummy block.
- See B-309 for how to specify 110V DC model (DC-DC converter).
- Color codes for units without LED lamps:

R (red), G (green), A (amber), Y (yellow), S (blue)

When using a commercially available lamp, choose a lamp with rated voltage 5 to 30V AC/DC and 1W maximum, and with the same base and shape.

Selector Switch

When specifying gold-plated silver contact and contact configuration:

```
TWND series (B-316 to B-319)

ASN 2 11 N - MAU

Optional contact

Codes>

ASD 2 11 N - MAU

Optional contact

Contact configuration

Optional contact

MAU: Gold-plated silver
```

Key removable position code (example)

	Position	Key removable position	Key removable		Part No. Example			
Postuoti		key removable position	position code		TWN series	TWND series		
		Removable in all positions	(blank)	ASN2K20N	ASN2K20N-N024401	ASD2K20N		
	Maintained	Removal in left only	В	ASN2K20NB	ASN2K20NB-N024401	ASD2K20NB		
-position		Removable in right only	С	ASN2K20NC	ASN2K20NC-N024401	ASD2K20NC		
	Spring return from right	Removal in left only	(blank)	ASN21K20N	ASN21K20N-N024401	ASD21K20N		
	Spring return from left	Removable in right only	(blank)	ASN22K20N	ASN22K20N-N024401	ASD22K20N		
		Removable in all positions	(blank)	ASN3K20N	ASN3K20N-N024401	ASD3K20N		
		Removable in left and center	В	ASN3K20NB	ASN3K20NB-N024401	ASD3K20NB		
		Removable in right and center	С	ASN3K20NC	ASN3K20NC-N024401	ASD3K20NC		
	Maintained	Removable in center only	D	ASN3K20ND	ASN3K20ND-N024401	ASD3K20ND		
		Removable in right and left	E	ASN3K20NE	ASN3K20NE-N024401	ASD3K20NE		
		Removal in left only	G	ASN3K20NG	ASN3K20NG-N024401	ASD3K20NG		
		Removable in right only	Н	ASN3K20NH	ASN3K20NH-N024401	ASD3K20NH		
-position		Removable in left and center	(blank)	ASN31K20N	ASN31K20N-N024401	ASD31K20N		
	Spring return from right	Removable in center only	D	ASN31K20ND	ASN31K20ND-N024401	ASD31K20ND		
		Removal in left only	G	ASN31K20NG	ASN31K20NG-N024401	ASD31K20NG		
Sį		Removable in right and center	(blank)	ASN32K20N	ASN32K20N-N024401	ASD32K20N		
	Spring return from left	Removable in center only	D	ASN32K20ND	ASN32K20ND-N024401	ASD32K20ND		
		Removable in right only	Н	ASN32K20NH	ASN32K20NH-N024401	ASD32K20NH		
	Spring return two-way	Removable in center only	(blank)	ASN33K20N	ASN33K20N-N024401	ASD33K20N		

[•] The key cannot be removed in spring return positions.

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Switches & Pilot Lights

Control Boxes

Emergency Stop Switches Enabling

Switches

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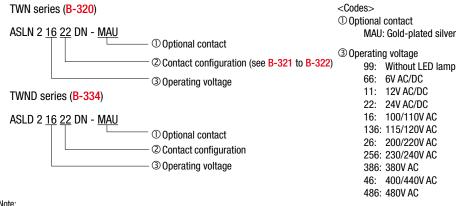
Circuit

Protectors

Ordering Information

Illuminated Selector Switch

When specifying gold-plated silver contact, contact configuration, and LED operating voltage:



- Odd number of contact blocks, such as 1NO, 1NC, 3NO, 2NO-1NC, 1NO-2NC, and 3NC, is not available for models of 100V AC or over.
- Illuminated selector switches of 24V AC/DC and below with two or four contact blocks contain a dummy block.
- See below for how to specify 110V DC model (DC-DC converter).
- Color codes for units without LED lamps: R (red), G (green), A (amber), Y (yellow), S (blue) When using a commercially available lamp, choose a lamp with rated voltage 5 to 30V AC/DC and 1W maximum, and with the same base and shape.

Pilot Light (LED)

When specifying LED operating voltage:

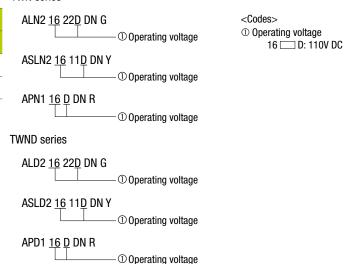
```
TWN series (B-324 to B-325)
                                                  <Codes>
                                                  ① Operating voltage
  APN1 26 DN R
                                                        99: Without LED lamp
                                                       66: 6V AC/DC
                       ① Operating voltage
                                                        11: 12V AC/DC
  UPQN3B 22 D R
                                                        22: 24V AC/DC
                                                        16: 100/110V AC
                       ① Operating voltage
                                                        126: 115/120V AC
                                                        26: 200/220V AC
  TWND series (B-336)
                                                        246: 230/240V AC
                                                        386: 380V AC
  APD1 26 DN R
                                                        46: 400/440V AC
                       ① Operating voltage
                                                        486: 480V AC
```

- See below for how to specify 110V DC model (DC-DC converter).
- Color codes for units without LED lamps: R (red), G (green), A (amber), Y (vellow), W (white), S (blue) When using a commercially available lamp, choose a lamp with rated voltage 5 to 30V AC/DC and 1W maximum, and with the same base and shape.

DC-DC Convertor Model (110V DC)

When specifying DC-DC convertor type on illuminated pushbuttons, illuminated selector switches, and pilot lights:

TWN series



- See 110V DC model (DC-DC converter) is not approved by standards (operating voltage: 90 to 140V DC).
- Odd number of contact blocks, such as 1NO, 1NC, 3NO, 2NO-1NC, 1NO-2NC, and 3NC, is not available for 100V DC model (DC-DC converter).

Flush/Extended/Extended w/Half Shroud/Extended with Full Shroud

Package Quantity: 1

			_	_		Package Quantity: 1	#
Shape	Operation	Contact	Part No. (Ordering No.)	Button Color Code	Dimensions	(All dimensions in mm.)	ot Lights
Flush		1NO	ABN110*	В			S.
ABN1		1NC	ABN101*	G			
AON1		1NO-1NC	ABN111*	R			
	Momentary	2N0	ABN120*	Y S	− * * Pa	Panel Thickness 0.8 to 7.5	APEM
		2NC	ABN102*	W			Switches &
		2NO-2NC	ABN122*	Note	4:4	- SS	Pilot Lights
		1NO	A0N110*	В			Control Boxes
		1NC	A0N101*	G	45.4 (1 or 2 blocks)	29.6	Emergency Stop Switches
	Maintained	1NO-1NC	A0N111*	R Y	65.4(3 or 4 blocks)	ø39	Enabling
	Walitaliou	2N0	A0N120*	Š			Switches
		2NC	A0N102*	W			Safety Products
		2NO-2NC	A0N122*	Note			Explosion Proof
Extended		1NO	ABN210*	В			Explosion Floor
AON2		1NC	ABN201*	Ğ			Terminal Blocks
	Momentary	1NO-1NC	ABN211*	R			Relays & Sockets
	,	2N0	ABN220*	Y S		Panel Thickness 0.8 to 7.5	
		2NC	ABN202*	W			Circuit Protectors
		2NO-2NC 1NO	ABN222* A0N210*		4	835	Power Supplies
ull (1NC	AUN210* AON201*	В			
		1NO-1NC	A0N201* A0N211*	G	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks)	29.6 039	LED Illumination Controllers Operator Interfaces
	Maintained	2N0	A0N211* A0N220*	R Y		 	Controllers
		2NC	A0N202*	Ś			Operator
		2NO-2NC	A0N222*	W			Controllers Operator
Extended with Half Shroud		1NO	ABN2G10*				Sensors
ABN2G		1NC	ABN2G01*	В			AUTO ID
AON2G		1NO-1NC	ABN2G11*	– G R			AUTO-ID
	Momentary	2N0	ABN2G20*	Ϋ́	Pai	nel Thickness 0.8 to 3.5	Interfaces Sensors
		2NC	ABN2G02*	S			
		2NO-2NC	ABN2G22*	W			Flush Silhouette
		1NO	AON2G10*		4 8 8		
		1NC	AON2G01*	B G	40.9 (1 or 2 blocks) 18	.5 29.6	ø16
	Maintained	1NO-1NC	AON2G11*	R	P	1.5	ø22
	Maintained	2N0	AON2G20*	Υ			
		2NC	AON2G02*	S W			ø30
		2NO-2NC	AON2G22*	VV			Miniature
Extended with Full Shroud		1NO	ABN2F10*	В			
ABN2F AON2F		1NC	ABN2F01*	G			Pilot Lights
	Momentary	1NO-1NC	ABN2F11*	R			
	mornoritar y	2N0	ABN2F20*	Y	1	Panel Thickness 0.8 to 6	
No.		2NC	ABN2F02*	S W			TWN
		2NO-2NC	ABN2F22*		4 4 4	4 2 2	-1 4414
The state of the s		1NO	AON2F10*	В	4 8 8		TWND
		1NC	A0N2F01*	G		14 29.6	ARN
	Maintained	1NO-1NC	AON2F11*	R	T - T	6.5 ø39	
		2N0	AON2F20*	Y S			CS
EN2 ON2 Extended with Half Shroud BN2G ON2G Extended with Full Shroud BN2F		2NC	A0N2F02*	J W			

• Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow), S (blue), W (white)

2NO-2NC

- Round bezel and shroud (metal): Chrome-plated
- Pushbuttons with 1 or 3 contact blocks have a dummy block.
- See B-307 for other contact configurations and gold-plated silver contacts.
- See B-312 for bottom view.
- Terminal screws: M3.5
- · Integrated terminal cover

Note ABN1, AON1 with button color of B (black), G (green), or (R) red Supply of color buttons B, G, R has been discontinued for ABN1/AON1 without color code. When ordering, make sure to specify the required button color code.

A0N2F22*

Control Boxes

Emergency
Stop Switches

Enabling
Switches

Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

Circuit
Protectors

Power Supplies

LED Illumination

Controllers

Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature Pilot Lights

TWND

CS

Mushroom/Mushroom w/Full Shroud/Jumbo Mushroom/Jumbo Mushroom w/Shallow Shroud/Jumbo Mushroom w/Deep Shroud

Package Quantity: 1

	Shape	Operation	Contact	Part No. (Ordering No.)	Button Color Code	Dimensions	(All dimensions in mm.)	
	Mushroom		1NO	ABN310*	В			
	ABN3 AON3		1NC	ABN301*	G			
_ /	7,010	Momentary	1NO-1NC	ABN311*	R			
Š.		,	2N0	ABN320*	Y S	Panel Thickness 0.8 to	7.5	
s S			2NC	ABN302*	W			
s			2NO-2NC	ABN322*		14 - 040	(
y			1NO 1NC	AON310* AON301*	В			
S			1NO-1NC	A0N311*	G R	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 22	29.6	
g s		Maintained	2N0	A0N320*	Y	- CO. 1 (C. C. 1 DIOCIO) - SI2 - EE - SI		
s s			2NC	A0N302*	S			
-			2NO-2NC	A0N322*	W			
of —	Mushroom with Full Shroud		1NO	ABN3G10*		Panel Thickness 0.8 to	6.5 _ 29.6 _	
s	ABN3G		1NC	ABN3G01*	В	Taler Michies Co to		
:S			1NO-1NC	ABN3G11*	G R	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
it		Momentary	2N0	ABN3G20*	Y			
S			2NC	ABN3G02*	S W	43.9 (1 or 2 blocks) 63.9 (3 or 4 blocks) 23.5		
s —			2NO-2NC	ABN3G22*				
n —	Jumbo Mushroom		1NO	ABN410*				
s	ABN4	Momentary	1NC	ABN401*	B G	Panel Thickness 0.8 to 7.5		
or s			1NO-1NC	ABN411*		4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		
s			2N0	ABN420*	R Y	4 8 8		
_ D			2NC	ABN402*	'	45.4 (1 or 2 blocks)		
_			2NO-2NC	ABN422*		65.4 (3 or 4 blocks) 29	29.6	
	Jumbo Mushroom with Shallow Shroud		1NO	ABN4G10*		Panel Thickness 0.8 to 7.5		
— е	ABN4G		1NC	ABN4G01*				
-			1NO-1NC	ABN4G11*	В			
6		Momentary	2N0	ABN4G20*	G R	4 4 8 8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	(())	
2			2NC	ABN4G02*	Y			
0			2NO-2NC	ABN4G22*		45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 29	29.6	
e —	Jumbo Mushroom with							
S	Deep Shroud ABN4F		1NO	ABN4F10*		Panel Thickness 0.8 to 7.5		
	ITFIUN		1NC	ABN4F01*	В		[]	
		Momentary	1NO-1NC	ABN4F11*	G	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		
N			2N0	ABN4F20*	R Y			
D —			2NC	ABN4F02*		45.4 (1 or 2 blocks)		
N			2NO-2NC	ABN4F22*		65.4 (3 or 4 blocks) 33	29.6	

- Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow), S (blue), W (white)
- Round bezel and shroud (metal): Chrome-plated
- Pushbuttons with 1 or 3 contact blocks have a dummy block.
- See B-307 for other contact configurations and gold-plated silver contacts.
- See B-312 for bottom view.
- Terminal screws: M3.5
- Integrated terminal cover

Mushroom Pushlock Turn Reset/Mushroom Push Turn Lock/Mushroom Pull

Package Quantity: 1

Shape	Contact	Part No. (Ordering No.)	Button Color Code	Dimensions	(All dimensions in mm.)	
Mushroom Pushlock Turn Reset (*1) AVN3	1NO	AVN310N*				
AVIVS	1NC	AVN301N*		Panel Thick	ness 0.8 to 7.5	
	1NO-1NC	AVN311N*	R			
	2N0	AVN320N*	Υ			
	2NC	AVN302N*		45.4 (1 or 2 blocks)	29.6	
	2NO-2NC	AVN322N*		65.4 (3 or 4 blocks) 23.6	F 71	
Mushroom Push Turn Lock AJN3	1NO	AJN310N*		Panel Thickness 0.8 to 7.5		
AJNO	1NC	AJN301N*	B G R			
	1NO-1NC	AJN311N*		4.1		
	2N0	AJN320N*	R			
	2NC	AJN302N*] '	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 23.6	29.6	
	2NO-2NC	AJN322N*		4- 4-		
Mushroom Pull AZN3	1N0	AZN310N*				
AZINS	1NC	AZN301N*		Panel Thicks	ness 0.8 to 7.5	
	1NO-1NC	AZN311N*	B G			
	2N0	AZN320N*	R Y	41.4	040	
	2NC	AZN302N*		45.4 25.1	5.5 stroke 29.6	
				* **** **	+	

- Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow)
- Round bezel (metal): Chrome-plated
- Pushbuttons with 1 or 3 contact blocks have a dummy block.
- See B-307 for other contact configurations and gold-plated silver contacts.
- . Mushroom pull has up to 2 contact blocks.
- Terminal screws: M3.5
- · Integrated terminal cover
- *1) Pushlock turn reset switches cannot be used as emergency stop switches. When emergency stop switches are required, use XN series emergency stop switches (ISO 13850 and IEC 60947-5-5 compliant).

Pushbutton operation

Pushlock Turn Reset

Button is maintained when pressed and is reset when turned clockwise.

Push Turn Lock

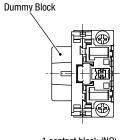
Button is locked when turned clockwise in the depressed position and is reset when turned counterclockwise.

Pulling the button operates the contacts, and releasing the button return the contacts.

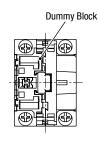
Pull contact operation

Contact	AZN3				
Comaci	Normal	Pull			
1NO	o _r o	- - -			
2NO-2NC	ტ •1•	0 0 e1e			
2N0	مړه مړه	- - - - - - - - - - - - - - - - - - -			
2NC	•••	● 1● ● 1●			

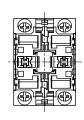
Bottom View (for non-illuminated pushbuttons and selector switches)



1 contact block (NO) (NC: opposite position)



3 contact blocks



2/4 contact blocks

- See B-348 for wiring.
- Integrated terminal cover

APEM

Control Boxes

Emergency Stop Switches Enabling Switches

Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

Circuit Protectors

Power Supplies

LED Illumination Controllers

Operator

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Flush Silhouette

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Miniature

Pilot Lights

TWND

ARN

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Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator

> Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature Pilot Lights

> TWND ARN CS

LED Illuminated Extended/Extended with Half Shroud/Extended with Full Shroud

Package Quantity: 1

Shape	Base	Operation	Operating Voltage	Contact	Part No. (Ordering No.)	Color Code	Dimens Pag		
xtended				1NO-1NC	ALN22211DN*				
LN2			24V AC/DC	2N0	ALN22220DN*				
OLN2				2NC	ALN22202DN*	R			
				1NO-1NC	ALN21611DN*	G			
		Momentary	100/110V AC	2N0	ALN21620DN*	Y A S			
			100,1101710	2NC	ALN21602DN*				
		200/220V		1NO-1NC	ALN22611DN*	– S PW			
			200/220V AC	2N0	ALN22620DN*	┦ '''			
(24VAC/DC)			200/2201710	2NC	ALN22602DN*				
,	BA9S			1NO-1NC	A0LN22211DN*				
_			24V AC/DC	2N0	AOLN22220DN*	_			
			247710700	2NC	A0LN22202DN*	R			
				1NO-1NC	AOLN21611DN*	⊢ G			
		Maintained	100/110V AC	2NO		Ϋ́			
		Maintaineu	100/110V AC	2NC	AOLNO1620DN*	_ A			
					AOLN21602DN*	_ S			
With transformer			200/2004 40	1NO-1NC	AOLN22611DN*	PW			
(100/110V AC)			200/220V AC	2NO	AOLN22620DN*				
xtended with Half Shroud				2NC	AOLN22602DN*				
xtended with Haif Shroud LGN2			0.41/4.0/50	1NO-1NC	ALGN22211DN*				
OLGN2			24V AC/DC	2N0	ALGN22220DN*	_			
. 🛋				2NC	ALGN22202DN*	R			
		Momentary 100/110V AC 200/220V AC		1NO-1NC	ALGN21611DN*	G Y			
	Momental		100/110V AC	2N0	ALGN21620DN*	Ä			
				2NC	ALGN21602DN*	S PW			
			200/220V AC	1NO-1NC	ALGN22611DN*				
				2N0	ALGN22620DN*				
(24V AC/DC)	BA9S —	BA9S			2NC	ALGN22602DN*		B-3	
				1NO-1NC	AOLGN22211DN*				
					24V AC/DC	2N0	AOLGN22220DN*	_	
					2NC	AOLGN22202DN*	R		
			ained 100/110V AC	1NO-1NC	AOLGN21611DN*	G Y A S PW			
		Maintained		2N0	AOLGN21620DN*				
				2NC	AOLGN21602DN*				
				1NO-1NC	AOLGN22611DN*				
With transformer			200/220V AC	2N0	AOLGN22620DN*				
(100/110V AC)				2NC	AOLGN22602DN*				
xtended with Full Shroud				1NO-1NC	ALFN22211DN*				
LFN2			24V AC/DC	2N0	ALFN22220DN*				
OLFN2				2NC	ALFN22202DN*	R			
				1NO-1NC	ALFN21611DN*	G			
		Momentary	100/110V AC	2N0	ALFN21620DN*	Υ			
		,		2NC	ALFN21602DN*	⊢ A S			
				1NO-1NC	ALFN22611DN*	S PW			
			200/220V AC	2NO	ALFN22620DN*	⊣ '''			
(24V AC/DC)	(24V AC/DC) BA9S		LUGILLUT AU	2NC	ALFN22602DN*	\dashv			
				1NO-1NC	AOLFN22211DN*				
			24V AC/DC	2NO	AOLFN22220DN*	_			
The state of			24V AU/DU	2NC	AOLFN2220DN*				
					⊢ R G				
	Maintained	100/110// 40	1NO-1NC	AOLFN21611DN*	$ \overset{a}{Y}$				
		Maintained	100/110V AC	2NO	AOLFN21620DN*	_ A			
			2NC	AOLFN21602DN*	S				
With transformer			000/000/110	1NO-1NC	AOLFN22611DN*	PW			
			200/220V AC	2N0	AOLFN22620DN*	1			

- Specify a color code in place of * in Part No. R (red), G (green), Y (yellow), A (amber), S
- (blue), PW (pure white)

 Illuminated pushbuttons have an LED lamp installed.

 Round bezel (metal): Chrome-plated
- See B-308 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.
- Illuminated pushbutttons of 24V AC/DC or below with 2 or 4 contact blocks have a dummy block.
- See B-308 for other contact configurations and gold-plated silver contacts.
 See B-314 for bottom view.
 Terminal screws: M3.5

- · Integrated terminal cover

Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors **Power Supplies** LED Illumination Controllers Operator Interfaces Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature

Pilot Lights

TWND ARN

CS

LED Illuminated Mushroom (ø40)/Mushroom Pushlock Turn Reset/Mushroom Push Turn Lock

Package Quantity: 1

						Pa	ckage Quantity: 1
Shape	Base	Operation	Operating Voltage	Contact	Part No. (Ordering No.)	Color Code	Dimensions Page
Mushroom (ø40)				1NO-1NC	ALN32211DN *		
ALN3 AOLN3			24V AC/DC	2N0	ALN32220DN *		
AULINS				2NC	ALN32202DN *	R	
				1NO-1NC	ALN31611DN *	G	
		Momentary	100/110V AC	2N0	ALN31620DN *	Y	
				2NC	ALN31602DN *	S	
				1NO-1NC	ALN32611DN *	PW	
			200/220V AC	2N0	ALN32620DN *		
(24V AC/DC)	BA9S			2NC	ALN32602DN *		
	BA95			1NO-1NC	AOLN32211DN *		
The state of the s			24V AC/DC	2N0	A0LN32220DN *		
				2NC	A0LN32202DN *	R	
				1NO-1NC	AOLN31611DN *	G	
		Maintained	100/110V AC	2N0	AOLN31620DN *	Y A	
				2NC	A0LN31602DN *	S	
				1NO-1NC	AOLN32611DN *	PW	
With tranformer			200/220V AC	2N0	AOLN32620DN *		
(100/110V AC)				2NC	A0LN32602DN *		B-315
Mushroom Pushlock Turn Reset				1NO-1NC	AVLN32211DN *		D-010
AVLN3 (*1)			24V AC/DC	2N0	AVLN32220DN *		
				2NC	AVLN32202DN *		
				1NO-1NC	AVLN31611DN *		
	BA9S	_	100/110V AC	2N0	AVLN31620DN *	R	
				2NC	AVLN31602DN *		
				1NO-1NC	AVLN32611DN *	1	
			200/220V AC	2N0	AVLN32620DN *]	
(24V AC/DC)				2NC	AVLN32602DN *		
Mushroom Push Turn Lock				1NO-1NC	AJLN32211DN *		
AJLN3			24V AC/DC	2N0	AJLN32220DN *		
				2NC	AJLN32202DN *	R	
				1NO-1NC	AJLN31611DN *	G	
	BA9S	_	100/110V AC	2N0	AJLN31620DN *	Ÿ	
				2NC	AJLN31602DN *	A	
				1NO-1NC	AJLN32611DN *	PW	
			200/220V AC	2N0	AJLN32620DN *		
(24V AC/DC)				2NC	AJLN32602DN *		

- Specify a color code in place of * in Part No. R (red), G (green), Y (yellow), A (amber), S (blue), PW (pure white)
- Illuminated pushbuttons have an LED lamp installed.
- Round bezel (metal): Chrome-plated
- See B-308 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.
- See B-308 for other contact configurations and gold-plated silver contacts.
- Illuminated pushbutttons of 24V AC/DC or below with 2 or 4 contact blocks have a dummy block.
- *1) Pushlock turn reset switches cannot be used as emergency stop switches. When emergency stop switches are required, use XN or HN series emergency stop switches (ISO 13850 and IEC 60947-5-5 compliant).
- . Terminal screws: M3.5
- · Integrated terminal cover

Illuminated pushbutton operation

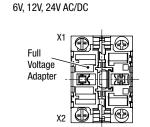
Pushlock Turn Reset

Button is maintained when pressed and is reset when turned clockwise.

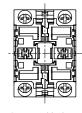
Push Turn Lock

Button is locked when turned clockwise in the depressed position and is reset when turned counterclockwise.

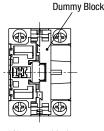
Bottom View (for illuminated pushbuttons, selector switches, and pilot lights)



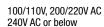
1 contact block

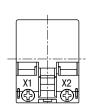


3 contact blocks

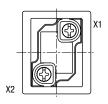


2/4 contact blocks





110V DC, 380V AC or over



DC-DC converter unit Terminal No. X1: positive Terminal No. X2: negative

• See B-348 for wiring.



Dimensions (Illuminated Pushbuttons)

Extended, LED illuminated (momentary/maintained)

All dimensions in mm.

ALN2/AOLN2 (terminal screws M3.5)

Integrated terminal cover

6, 12, 24V AC/DC · Without LED Lamp

APEM

Control Boxes

Emergency Stop Switches

Enabling Switches Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

Circuit Protectors

Power Supplies LED Illumination

Controllers

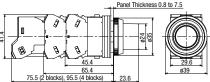
Operator Interfaces

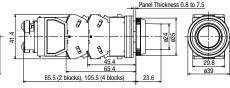
Sensors

AUTO-ID

100/110V AC, 200/220V AC (240V AC or below)

110V DC/380V AC or over





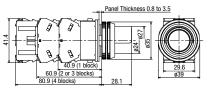
Extended with Half Shroud, LED illuminated (momentary/maintained) Integrated terminal cover

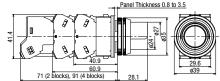
ALGN2/AOLGN2 (terminal screws M3.5)

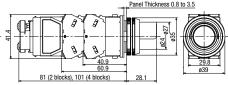
6, 12, 24V AC/DC· Without LED Lamp

100/110V AC, 200/220V AC (240V AC or below)

110V DC/380V AC or over





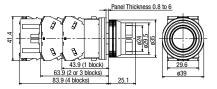


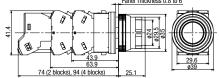
Extended with Full Shroud, LED illuminated (momentary/maintained) ALFN2/AOLFN2 (terminal screws M3.5) Integrated terminal cover

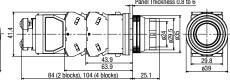
6, 12, 24V AC/DC · Without LED Lamp

100/110V AC, 200/220V AC (240V AC or below)

110V DC/380V AC or over







Flush Silhouette

ø16

ø22

Miniature

Pilot Lights

TWND ARN CS ALN3/AOLN3 (terminal screws M3.5)

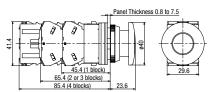
Integrated terminal cover

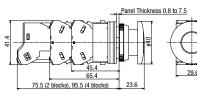
6, 12, 24V AC/DC · Without LED Lamp

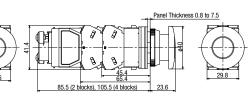
Mushroom (ø40), LED illuminated (momentary/maintained)

100/110V AC, 200/220V AC (240V AC or below)

110V DC/380V AC or over



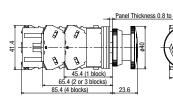




Mushroom Pushlock Turn Reset, LED illuminated

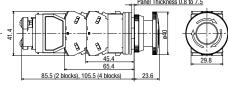
AVLN3 (terminal screws M3.5) 6, 12, 24V AC/DC · Without LED Lamp Integrated terminal cover 100/110V AC, 200/220V AC

110V DC/380V AC or over







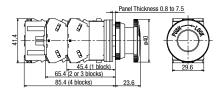


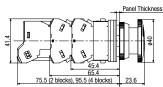
Mushroom Push Turn Lock, LED illuminated

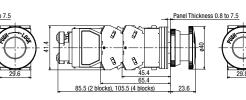
AJLN3 (terminal screws M3.5) 6, 12, 24V AC/DC · Without LED Lamp Integrated terminal cover

100/110V AC, 200/220V AC

110V DC/380V AC or over







Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature Pilot Lights

TWND

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CS

ASN Selector Switches (Knob Operator)

Package Quantity: 1

Shape	Knob Opera	tor						Ô					rackage quality.
		Contact C	Configuration	n			Maintained	Spring Return from Right		Spring	Retur	n from	Left
		Contact	Block		perator Position		1 2	1 • 2	Contact	Block		rator ition	1, 2
	Contact	Mounting Position	Contact	1	2				Mounting Position	Contact	1	2	
90°	1NO (10)	① ②	NO —	Dun	● nmy Blo	ock	ASN210N	ASN2110N	① ②	NO —	•		ASN2210N
2-position	1NO-1NC (11)	① ②	NO NC	•	•		ASN211N	ASN2111N	0 2	NO NC	•	•	ASN2211N
	2NO (20)	① ②	NO NO		•		ASN220N	ASN2120N	0 2	NO NO	•		ASN2220N
	2NO-2NC	① ②	NO NC	•	•		ASN222N	ASN2122N	① ②	NO NC	•	•	ASN2222N
	(22)	3 4	NO NC	•	•		AGNELLIN		3 4	NO NC	•	•	
		Contact C	Configuration				Maintained	Spring Return from Right	Spring	g Return fro	om Lef	t	Spring Return Two-way
	Contact	Contact	Block		perator Position		1 0 2	1 0 2		1 0 2			1 0 2
		Mounting Position	Contact	1	0	2	V						
	2N0 (20)	① ②	NO NO	•		•	ASN320N	ASN3120N		ASN3220N	I		ASN3320N
	2NC (02)	① ②	NC NC				ASN302N	ASN3102N		ASN3202N	V		ASN3302N
	2NO-2NC	① ②	NO NO	•		•							
45° 3-position	(22)	3	NC NC				ASN322N	ASN3122N		ASN3222N	V		ASN3322N
Position	4N0	① ②	NO NO	•		•							
	(40)	3	NO NO	•		•	ASN340N	ASN3140N		ASN3240N	N		ASN3340N
	4NC (04)	① ② ③	NC NC				ASN304N	ASN3104N		ASN3204N	J		ASN3304N
		4 0	NC NO	•		•	\$						
	☆ 3S	② ③ ④	NO NC	Dun	● nmy Blo		ASN33SN-243	_		_			_

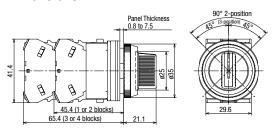
- Knob: Black
- Round bezel (metal): Chrome-plated
- Selector switches with 1 or 3 contact blocks have a dummy block.
- Knob operator can be installed at 45-degree intervals in addition to the positions shown in the above table.
- See B-321 to B-322 for other contact configurations. Turn the operator to each position accurately.

Contact Block Mounting Position

- Selector switches with \$\sigma\$ have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.
- See B-308 for gold-plated silver contacts.
- See B-312 for bottom view.

Dimensions

All dimensions in mm.



Terminal Screws: M3.5

Terminal cover: integrated



ASN-□ Selector Switches (Lever Operator)

Package Quantity: 1

Lever Operator ASN□L Shape APEM Spring Return Contact Configuration Spring Return from Left Maintained from Right Control Boxes Operator Operator Contact Block Contact Block Position Position Emergency Contact Mounting Mounting Contact 2 1 Contact Enabling Position Position Switches 1N0 1 NO 1 NO ASN2L10N ASN21L10N ASN22L10N Safety Products (10)2 **Dummy Block** 2 2-position 1NO-1NC 1 NO 1 NO • **Explosion Proof** ASN2L11N ASN21L11N ASN22L11N (11)2 NC • 2 NC • Terminal Blocks • 1 1 N0 NO 2N0 ASN2L20N ASN21L20N ASN22L20N (20)2 NO 2 NO Relays & Sockets 1 NO 1 N0 Circuit 2 2 2NO-2NC NC • NC lacktriangleProtectors ASN2L22N ASN21L22N ASN22L22N (22)3 NO • 3 NO • **Power Supplies** 4 NC • 4 NC • Spring Return Spring Return LED Illumination Contact Configuration Maintained Spring Return from Left from Right Two-way Controllers **Operator** Contact Block Position Operator Contact Mounting Contact 1 2 0 Position Sensors 1 NO • 2N0 ASN3L20N ASN31L20N ASN32L20N ASN33L20N AUTO-ID (20)2 NO • 1 N0 2NC ASN3L02N ASN31L02N ASN33L02N ASN32L02N 2 N0 1 NO Flush Silhouette 2NO-2NC 2 NO ASN3L22N ASN31L22N ASN32L22N ASN33L22N (22)3 NO 45° ø16 3-position 4 N0 1 N0 ø22 2 NO • 4N0 ASN3L40N ASN31L40N ASN32L40N ASN33L40N (40)3 N0 • 4 NO Miniature 1 NO Pilot Lights 4NC 2 N0 ASN3L04N ASN31L04N ASN32L04N ASN33L04N (04)3 NO 4 N0 1 N0 ☆ 3S NO 2 ASN3L3SN-243 3 NO

ARN • Lever: Black

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- Round bezel (metal): Chrome-plated
- Selector switches with 1 or 3 contact blocks have a dummy block.

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Knob operator can be installed at 45-degree intervals in addition to the positions shown in the above table.

Dummy Block

• See B-321 to B-322 for other contact configurations. Turn the operator to each position accurately.

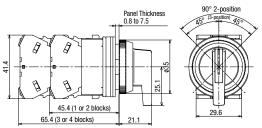
- Selector switches with
 have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.
- See B-308 for gold contact.
- See B-312 for bottom view.

Contact Block Mounting Position



Dimensions

All dimensions in mm.



Terminal Screws: M3.5

Terminal cover: integrated

ASN-□**K** Key Selector Switches

Package Quantity: 1

Shape	Key Selector ASN□K	r (Key No. 0)											rabinago douniary.	t Lights
							-							APEM
		Contact C	onfiguratio	n			Maintained	Spring Return from Right		Spring	Return	from l	_eft	Switches & Pilot Lights
		Contact	Block		perat Positio		1 2	1 • 2	Contact	Block		rator ition	2 بد1	Control Boxes
	Contact	Mounting Position	Contact	1	2				Mounting Position	Contact	1	2		Emergency Stop Switches Enabling
	1NO	①	NO NO		•		A CNOV 1 ON	ACMO4K40M	①	NO	•		ACNIOOK10N	Switches
90°	(10)	2	_	Dur	nmy E	Block	ASN2K10N	ASN21K10N	2	_	_	_	ASN22K10N	Safety Products
2-position	1NO-1NC	1	NO		•		ASN2K11N	ASN21K11N	1	NO	•		ASN22K11N	Explosion Proof
	(11)	2	NC	•			AONZKITN	AONZIKITI	2	NC		•	AONZZKITIV	
	2N0	①	NO		•		ASN2K20N	ASN21K20N	1	NO	•		ASN22K20N	Terminal Blocks
	(20)	2	NO NO		•				2	NO NO	•			Relays & Sockets
		①	NO NO		•	-			0	NO NO	•			Circuit
	2NO-2NC (22)	2	NC	•		-	ASN2K22N	ASN21K22N	2	NC	_	•	ASN22K22N	Protectors
	(22)	<u>3</u>	NO NC	•	•				3	NO NC	•	•		Power Supplies
			Configuration	_			Maintained	Spring Return		g Return fro	om Lef		Spring Return	LED Illumination
				()perat	or		from Right					Two-way	Controllers
	Contact	Contact	BIOCK	ı	Positio	n	1 0 2	1 0 2		1 0 2			1 0 2	Operator
	Oontact	Mounting Position	Contact	1	0	2				$\overline{}$				Interfaces Sensors
	2N0	①	NO	•			ASN3K20N	ASN31K20N		ASN32K20	N		ASN33K20N	
	(20)	2	NO			•	AONONZON	AONOTIZON		AONOZNZO			AONOSINZON	AUTO-ID
	2NC	1)	NC				ASN3K02N	ASN31K02N		ASN32K02	N		ASN33K02N	
	(02)	2	NC				7.0.1.0.1.0.2.1	7101101110211					7101100110211	_
		①	NO NO	•										
	2NO-2NC (22)	2	NO NC				ASN3K22N	ASN31K22N		ASN32K22	N		ASN33K22N	Flush Silhouette
45°	(44)	<u>3</u>	NC NC				-							ø16
3-position		1	NO NO	-										Ø22
	4NO	2	NO			•	-							W22
	(40)	3	NO	•			ASN3K40N	ASN31K40N		ASN32K40	N		ASN33K40N	ø30
	, ,	4	NO			•								Miniature
		①	NC											
	4NC	2	NC				ASN3K04N	ASN31K04N		ASN32K04	N		VCNISSINOVI	Pilot Lights
	(04)	3	NC				ASINS/NU4IN	ASINS I KU4IN		MONOZNU4	14		ASN33K04N	
		4	NC											_
		①	NO	•										
	☆ 3S	2	NO			•	☆	_		_			_	TWN
		3	NC	_	•	<u> </u>	ASN3K3SN-243							TWND
		4		Dur	nmy E	Block] ———

- Cylinder: Chrome-plated
- Round bezel (metal): Chrome-plated
- Key selector switches with 1 or 3 contact blocks have a dummy block.
- See B-321 to B-322 for other contact configurations.
- On spring-returned types, the key can be released only from the maintained position. On maintained types, the key can be released from every position. See $\ensuremath{\text{B-308}}$ for specifying key retained positions.

Contact Block Mounting Position



- Key selector switch is supplied with two standard keys.
 (1) Insert the key completely before turning the key, otherwise failure may result.
 (2) Turn the operator to each position accurately.
- Different key number is available upon request. Contact IDEC.
- \bullet Selector switches with $\stackrel{\iota}{\bowtie}$ have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.
- See B-308 for gold-plated silver contacts.
- See B-312 for bottom view.

Dimensions

All dimensions in mm. 90° 2-position Panel Thickness 16.5 45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks)

Terminal Screws: M3.5

Terminal cover: integrated

TWND ARN CS

ASN-□**K** Key Selector Switches

Package Quantity: 1

Key Selector (Key No. 24401) ASN□K Shape APEM Spring Return **Contact Configuration** Maintained Spring Return from Left from Right Control Boxes Operator Operator Contact Block Contact Block Position Position Emergency Contact Mounting Mounting Stop Switches Contact 1 2 Contact 1 2 Position Position Enabling Switches 1N0 1 NO lacktriangleASN2K10N-ASN21K10N-1 NO ASN22K10N-Safety Products (10)N024401 N024401 N024401 2 **Dummy Block** 2 1NO-1NC 1 NO ASN2K11N-ASN21K11N-1 NO • ASN22K11N-2-position **Explosion Proof** N024401 (11)2 NC • N024401 N024401 2 NC Terminal Blocks 2N0 1 NO • ASN2K20N-ASN21K20N-1 NO • ASN22K20N-N024401 N024401 (20)2 NO • N024401 2 NO • Relays & Sockets 1 NO lacktriangle1 NO • Circuit 2NO-2NC 2 NC • ASN2K22N-ASN21K22N-2 NC • ASN22K22N-Protectors N024401 N024401 N024401 (22)3 NO • 3 NO • **Power Supplies** 4 NC 4 • NC Spring Return Spring Return LED Illumination **Contact Configuration** Maintained Spring Return from Left from Right Two-way Controllers **Operator** Contact Block Position Operator Contact Mounting Interfaces Contact 1 0 2 Position Sensors 2N0 1 NO ASN3K20N-ASN31K20N-ASN32K20N-ASN33K20N-N024401 N024401 N024401 N024401 AUTO-ID (20)2 N0 1 NC 2NC ASN3K02N-ASN31K02N-ASN32K02N-ASN33K02N-N024401 (02)N024401 N024401 N024401 2 NC 1 NO 2 N0 Flush Silhouette 2NO-2NC ASN3K22N-ASN31K22N-ASN32K22N-ASN33K22N-N024401 N024401 N024401 N024401 (22)NC 3 45° ø16 4 NC 3-position ① N0 ø22 2 N0 • 4N0 ASN3K40N-ASN31K40N-ASN32K40N-ASN33K40N-(40)N024401 N024401 N024401 N024401 3 NO • 4 NO Miniature 1 NC Pilot Lights NC 4NC 2 ASN3K04N-ASN31K04N-ASN32K04N-ASN33K04N-(04)3 NC N024401 N024401 N024401 N024401 4 NC 1 N0 2 N0 •

ASN3K3SN-

243-N024401

- · Cylinder: Chrome-plated
- · Round bezel (metal): Chrome-plated

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• Key selector switches with 1 or 3 contact blocks have a dummy block.

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- See B-321 to B-322 for other contact configurations.
- On spring-returned types, the key can be released only from the maintained position. On maintained types, the key can be released from every position. See B-308 for specifying key retained positions.

NC

Dummy Block

Contact Block Mounting Position



- · Key selector switch is supplied with two standard keys.
- Insert the key completely before turning the key, otherwise failure may result.
- (2) Turn the operator to each position accurately.
- Different key number is available upon request. Contact IDEC.
- Selector switches with
 have a half contact operating current (load switching) current value). Rated insulation voltage and rated current remain the same.
- See B-308 for gold-plated silver contacts.
- See B-312 for bottom view.

Dimensions

Panel Thickness 45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks)

Terminal Screws: M3.5

All dimensions in mm. 90° 2-position

Terminal cover: integrated

For more information, visit http://asia.idec.com

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Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature Pilot Lights

TWND ARN

CS

ASLN Illuminated Selector Switches (LED)

Package Quantity: 1

Shape	Illuminate ASLN	d Selector	Switches	s (B <i>i</i>	A9S	Base	2)	(0.11.40/10.0)							
		Contact C	onfigurati	on				(24V AC/DC) Maintained	Spring Return		Sprin	 g Ret	urn fro	om Left	
		Contact		0	pera		Rated		from Right	Contact	•	Оре	rator		Color
	Contact	Mounting Position	Contact	1	ositi 2	on	Voltage	1 2	1 2	Mounting Position		Pos 1	ition 2	1 2	Code
5		1	NO		•		24V AC/DC	ASLN22211DN*	ASLN212211DN*	①	NO	•		ASLN222211DN*	
) Sific	1NO-1NC	2	NC	•	† -	1	100/110V AC	ASLN21611DN*	ASLN211611DN*	2	NC		•	ASLN221611DN*	1 1
2-pc	(11)		,	_		_	200/220V AC	ASLN22611DN*	ASLN212611DN*					ASLN222611DN*	$\frac{1}{2}$ R
90° 2-position	2110	①	NO		•		24V AC/DC	ASLN22220DN*	ASLN212220DN*	①	NO	•		ASLN222220DN*	Ğ
6	2NO	2	NO		•	_	100/110V AC	ASLN21620DN*	ASLN211620DN*	2	NO	•		ASLN221620DN*	Ϋ́
	(20)					_	200/220V AC	ASLN22620DN*	ASLN212620DN*					ASLN222620DN*	À
		①	NO		•		24V AC/DC	ASLN22222DN*	ASLN212222DN*	①	NO	•		ASLN222222DN*	S
	2NO-2NC	2	NC	•			100/110V AC	ASLN21622DN*	ASLN211622DN*	2	NC		•	ASLN221622DN*	PW
	(22)	3	NO		•		200/220V AC	ASLN22622DN*	ASLN212622DN*	3	NO	•		ASLN222622DN*]
		4	NC	•			_		_	4	NC		•	_	
		Contact C	onfigurati	on				Maintained	Spring Return from Right	Spring	Return fi	rom L	eft	Spring Return Two-Way	
	Contact	Contact	1	P	pera	ion	Rated Voltage	1 0 2	1 0 2		1, 0	2		1,0,2	Color Code
		Position	Contact		0	2	DAV AC/DC	ACI NOOOODNI:	ACI NO 1000DN	ACI	Nagaga	DN		ACI NOOQOODNI.	
	2N0	① ②	NO NO	•	+	•	24V AC/DC 100/110V AC	ASLN32220DN*	ASLN312220DN*		N322220			ASLN332220DN*	- I
	(20)	(e)	INU				200/220V AC	ASLN31620DN* ASLN32620DN*	ASLN311620DN* ASLN312620DN*	t	.N321620 .N322620			ASLN331620DN* ASLN332620DN*	-
		①	NC				24V AC/DC	ASLN32020DN*	ASLN312020DN*		.N322020 .N322202			ASLN332020DN*	1 I
=	2NC	2	NC		⊨		100/110V AC	ASLN31602DN*	ASLN312202DN*		N321602			ASLN331602DN*	†
sitic	(02)	<u> </u>	INO				200/220V AC	ASLN32602DN*	ASLN311002DN*		N322602			ASLN331602DN*	†
3-position		①	NO	•	Т	Τ	24V AC/DC	ASLN32222DN*	ASLN312222DN*	_	N322222			ASLN332202DN*	∣ , ∣
45°3	2NO-2NC	2	NO NO		+	•	100/110V AC	ASLN31622DN*	ASLN311622DN*		N321622			ASLN331622DN*	RG
45	(22)	3	NC		1	5	200/220V AC	ASLN32622DN*	ASLN312622DN*	†	N322622			ASLN332622DN*	γ
	(= - /	4	NC		5	Г			-	AUL					À
		0	NO	•	T		24V AC/DC	ASLN32240DN*	ASLN312240DN*	ASI	N322240	DN*		ASLN332240DN*	s
	4N0	2	NO	Ť	1	•	100/110V AC	ASLN31640DN*	ASLN311640DN*		N321640			ASLN331640DN*	PW
	(40)	3	NO	•	T		200/220V AC	ASLN32640DN*	ASLN312640DN*		N322640			ASLN332640DN*	1
	` -'	4	NO	Ē		•	_	_	_	7.52				_	1 I
		0	NC			—	24V AC/DC	ASLN32204DN*	ASLN312204DN*	ASL	.N322204	1DN*		ASLN332204DN*	1 l
	4NC	2	NC			Ī	100/110V AC	ASLN31604DN*	ASLN311604DN*		N321604			ASLN331604DN*	1 l
	(04)	3	NC				200/220V AC	ASLN32604DN*	ASLN312604DN*		N322604			ASLN332604DN*]
		4	NC				_	_	_		_			_	1 i

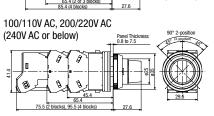
- Specify a color code in place of * in Part No.
- R (red), G (green), Y (yellow), A (amber), S (blue), PW (pure white)
- Illuminated selector switches have an LED lamp installed.
- Round bezel (metal): chrome-plated
- See B-309 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.
 Illuminated selector switches of 24V AC/DC or below with 2 or 4 contact blocks have a
- See B-321 to B-322 other contact configurations.
- Turn the operator to each position accurately.
- See B-309 for gold-plated silver contacts.
- . See B-314 for bottom view.

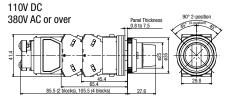
Contact Block Mounting Position Dimensions

All dimensions in mm.

6, 12, 24V AC/DC Without LED Lamp







Terminal Screws: M3.5

Terminal cover: integrated

Control Boxes Emergency Enabling Switches Safety Products

Terminal Blocks

Circuit Protectors **Power Supplies** LED Illumination Controllers Operator

> Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature Pilot Lights

> TWND ARN CS

Selector Switches Contact Configuration (90° 2-position)

					Op	perator Opera	tion and Circ	uit	
		Cont	act	Maint 1	tained 2		Return Right	Spring from	Return Left 2
Ott		Bloo	ck				<i></i>		
Contact Configuration	Circuit Code			Knob Lever	Key	Knob Lever	Key	Knob Lever	Key
				Operator	Position	Operato	Position	Operator	Position
		Mounting	Contact	1	2	1	2	1	2
		Position			Ø				Ø
10	Not	1	NO		•		•	•	
10	required	2	_	Dumm	y Block	Dumm	y Block	Dumm	y Block
01	Not	1	NC	•		•			•
UI	required	2	_	Dumm	y Block	Dumm	y Block	Dumm	y Block
	☆	1	EM			(
2R	118	2	LB						
∠n	☆	1	EM						
	168	2	LB						

						Or	perator 0	peration	and Circ	uit		
				N	laintaii			ring Ret rom Rigi			ring Refrom Le	
		Cont Blo			<u></u>	2		$\overline{}$			<u>'</u>	, 2
Contact Configuration	Circuit Code			Knob Lever	Key	Illumi- nated	Knob Lever	Key	Illumi- nated	Knob Lever	Key	Illumi- nated
				Opei	rator P	osition	Ореі	rator Pos	sition	Opei	ator Po	sition
		Mounting Position	Contact	1		2	1		2	1		2
11	Not	①	NO			•			•	•		
- ''	required	2	NC	•			•					•
20	Not	①	NO			•			•	•		
20	required	2	NO			•			•	•		
02	Not	1	NC	•			•		,			•
02	required	2	NC	•			•					•
		1	NO			•			•	•		
22	Not	2	NC	•			•					•
	required	3	NO			•			•	•		
		4	NC	•			•					•
		①	NC	•			•					•
31	107	2	NO			•			•	•		
"	107	3	NO			•			•	•		
		4	NO			•			•	•		
		①	NO			•			•	•		
40	Not	2	NO			•			•	•		
40	required	3	NO			•			•	•		
		4	NO			•			ullet	•		

[•] Selector switches with 🜣 have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.

Part No. Development

Contact Block Mounting Position

ASN 2 L 31 N - 107



- ① Circuit code Contact configuration 3 Operator shape Blank: knob K: key Position/Operator operation
 - 2: 2-position, maintained
 - 21: 2-position, spring return from right 22: 2-position, spring return from left

Selector Switches Contact Configuration (45° 3-position)

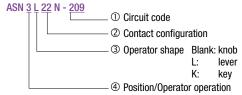
											perato	r Opera	ation an	d Circu	iit				Ę.
Contact	Circuit Code	Cont Blo		Оре	rator Pos	sition	N 1	Maintaine			ing Retom Rig	ht	f	ring Re rom Le	ft	T	ing Reworks	y	t Lights
Configuration		Mounting Position	Contact	1	0	2	Knob/ Lever	Key	Illumi- nated	Knob/ Lever	Key	Illumi- nated	Knob/ Lever	Key	Illumi- nated	Knob/ Lever	Key	Illumi- nated	APEM Switches & Pilot Lights
	202	1)	NO	•		Ť					,			√			,		Control Boxes
	202	2	NC					ν ——			√			ν			√		Emergency
11	203	0	NC					√			√			√			√		Stop Switches Enabling
		2	NO NC			•					•						•		Switches
	303	① ②	NC NO		•	•	1	$\sqrt{}$			$\sqrt{}$			√			$\sqrt{}$		Safety Products
	Not	1	NO NO	•															Explosion Proof
20	required	2	NO	_		•		√			$\sqrt{}$			√			√		Explosion Proof
00	Not	0	NC								,						,		Terminal Blocks
02	required	2	NC					-√			V			√			V		Relays & Sockets
		0	NO	•															Circuit
	Not required	2	NO NC		_	•		√			$\sqrt{}$			$\sqrt{}$			$\sqrt{}$		Protectors
	requireu	<u>3</u> <u>4</u>	NC NC		_														Power Supplies
		1	NO NO	•															LED Illumination
	000	2	NC					,			,								
	209	3	NC					V			√			_			_		Controllers
		4	NO			•													Operator Interfaces
		0	NC				-												Sensors
22	210	3	NO NC			_					$\sqrt{}$						$\sqrt{}$		
		<u> </u>	NO NO																AUTO-ID
		0	NC		•										-				
	04.0	2	NO			•		,											
	310	3	NC		•			√			_			_			_		Flush Cilhauatta
		4	NO			•													Flush Silhouette
		0	NO	•		•													ø16
	311	2	NO NO			•		√			√			√			√		ø22
		<u>3</u>	NC NC		-			•			-			•			•		
		1	NO NO	-															ø30
	Not	2	NO			•	1												Miniature
40	required	3	NO	•				√			√			√			√		Dilat Liebta
		4	NO			•													Pilot Lights
		①	NC																
04	Not	2	NC				-	√			V			√			√		
•	required	3	NC				-	٧			٧			٧			٧		TWN
		4	NC NO											-					
	☆	① ②	NO NO	•		•													TWND
3S	243	3	NC		•		١	/	-		_			_			_		ARN
		4		Du	ımmy Blo	ock													CS
Selector switch	hoo with ⊀ ho	-	toot opera	_				t volue) Dotod	Lingulat	ion vol	togo on	d rotod	OURTON	t romaiı	the ee	ma		UJ

• Selector switches with 🜣 have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.

Contact Block Mounting Position

Part No. Development





3: 3-position, maintained

31: 3-position, spring return from right

32: 3-position, spring return from left

33: 3-position, spring return two-way

[•] On selector switches with ☆, the contact blocks may overlap each other while turning the ring or lever operator.

Control Boxes

Emergency
Stop Switches

Enabling
Switches

Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

Circuit
Protectors

Power Supplies

LED Illumination

Controllers

ASBN2 Selector Pushbuttons

						Ring P	Position			
Ohama	Contact	Circuit	Con Blo	tact ock	Left			Right	Button	Ring Operator
Shape	Configuration	Code							Color Code	
			Mounting	Contact			button			Part No.
			Position		Normal	Push	Normal	Push		(Ordering No.)
Ring Operator (90°2-position)		A03	①	NO NO		•		•		ASBN211N-A03*
ASBN2			② ①	NC NC	•					
	11 (1NO-1NC)	☆ K04	2	EM		•			В	☆ ASBN211N-K04*
	(1110 1110)		①	NO NO		•			G R	AODINZ I IN-RO4**
		G03	2	NC	•		•	Blocked	Y	ASBN211N-G03*
	20		0	NO		•	_			
	(2NO)	D01	2	NO				•		ASBN220N-D01*
			①	NO		•		•		
		400	2	NC	•					ACRNOCON ACC.
		A08	3	NO		•		•		ASBN222N-A08*
			4	NC	•					
			①	NO		•		•		
		☆	2	NO				•		☆
		C10	3	NC	•					ASBN222N-C10*
			4	NC						
			①	NO		•				
		D10	2	NO NO						ASBN222N-D10*
			3	NC	•					
			4	NC			•			
			①	NO NO		•		•	В	
	22 (2NO-2NC)	☆ E10	3	NC NC			_		G R	☆ ASBN222N-E10*
	(2110 2110)	EIU	4	NC		_			Y	ASDINZZZIN-ETU*
			0	NO NO				•		
		☆	2	NO NO		•				☆
		F10	3	NC			•			ASBN222N-F10*
			4	NC	•					
			①	NO		•				
		010	2	NO		•]		ACDMOOCH 040
		G10	3	NC	•		•	Blocked		ASBN222N-G10*
			4	NC	•		•			
			①	NC	•					
		☆	2	NC	•					☆
		K15	3	EM		•				ASBN222N-K15*
			4	EM		•				

TWN

Sensors AUTO-ID

Flush Silhouette

ø16 ø22

TWND

Miniature Pilot Lights

ARN

744

CS

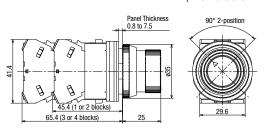
- Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow)
- Bezel (metal): Chrome-plated
- Circuit code G: The pushbutton does not operate when the ring operator is turned to the right position.
- Circuit codes E and F: The right and left NC contact blocks on circuit code E or F may overlap each other while turning the ring operator. The NO and NC contact blocks on circuit code F may overlap each other while pressing the button.
- When using the selector pushbutton, do not turn the ring operator with the pushbutton depressed. Otherwise, damage or failure may be caused.
- Selector switches with 🖄 have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.
- See B-312 for bottom view.

Contact Block Mounting Position



Dimensions Ring operator (90° 2-position)

(All dimensions in mm.)



Terminal Screws: M3.5

Terminal cover: integrated

Pilot Lights Round, Square Extended, Rectangular (Marking)

Package Quantity: 1

							ckage Quantity: 1
Shape	Illumination	Base	Rated Voltage	Part No. (Ordering No.)	Color Code	LED Lamp Part No.	Dimensions Page
Round APN1			24V AC/DC	APN122DN*	R, G, Y, A, S, PW	LSRD-2	
AFINI			100/110V AC	APN116DN*	R, G, Y, A, S, PW		
(24V AC/DC)	LED	BA9S	200/220V AC	APN126DN*	R, G, Y, A, S, PW	LSRD-6	
Square Extended UPQN3B			24V AC/DC	UPQN3B22D*	R, G, Y, A, S, PW	LSRD-2	
	LED	BA9S	100/110V AC	UPQN3B16D*	R, G, Y, A, S, PW	LSRD-6	B-325
(24V AC/DC)			200/220V AC	UPQN3B26D*	R, G, Y, A, S, PW	LOND-0	
Rectangular (Marking) UPQN4			24V AC/DC	UPQN422D*	R, G, Y, A, S, PW	LSRD-2	
	LED	BA9S	100/110V AC	UPQN416D*	R, G, Y, A, S, PW	LCDD 6	
(24V AC/DC)			200/220V AC	UPQN426D*	R, G, Y, A, S, PW	LSRD-6	

• Specify a color code in place of * in Part No. R (red), G (green), Y (yellow), A (amber), S (blue), PW (pure white)

- Round bezel (metal): chrome-plated
- Square bezel (metal): chrome-plated
- Pilot lights have an LED lamp installed.
- On the rectangular marking pilot light, a clear lens and a color marking plate (white) are used for W (white) illumination.
- See B-346 for the marking plate size of rectangular pilot lights.
- See B-309 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.
- Terminal cover is installed on pilot lights for electric shock prevention.

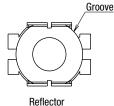
Type	Terminal Cover	Quantity
6V, 12V, 24V AC/DC	APN-PVL	1
100V/110V AC, 200/220V AC	N-VL3	1
110V DC	N-VL3	1

Note: DC-DC converter types are not approved by UL and CSA, and not CE compliant.

• See B-314 for bottom view.

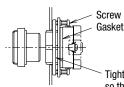
Reflector

- 1. The lamp housing of the square LED illuminated pilot lights has a built-in reflector.
- 2. Make sure that the reflector does not fall off when removing the lens or making plate.
- 3. When replacing the LED lamp of UPQN4 (rectangular), use a lamp holder tool (OR-55).
- 4. To remove the reflector, insert a flat screwdriver inside the groove of the reflector and lightly push out.



Panel Mounting of Square Pilot Lights

- 1. Tighten the square bezel to the operator and position the bezel correctly.
- 2. Lightly tighten the screw to secure the pilot light on the panel.
- 3. After tightening, do not turn the square bezel, otherwise it may fall off.



Tighten the screw lightly so that the panel does not bend. Recommended tightening torque: 0.15 Nm APEM

Control Boxes Emergency Stop Switches

Enabling Switches Safety Products

Explosion Proof

Terminal Blocks Relays & Sockets

Circuit Protectors

Power Supplies LED Illumination

Controllers

Operator

Sensors

AUTO-ID

Flush Silhouette

ø16 ø22

Miniature

Pilot Lights

TWND

ARN CS

Control Boxes

Emergency Stop Switches Enabling

Switches Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

Power Supplies LED Illumination Controllers

Circuit Protectors

Operator

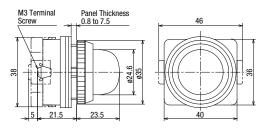
Interfaces

Sensors AUTO-ID

Dimensions (Pilot Light)

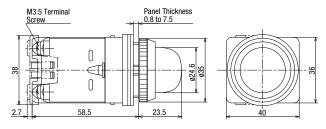
Round APN1

6V, 12V, 24V AC/DC (Terminal Cover: APN-PVL) Without LED Lamp



Terminal screws: M3

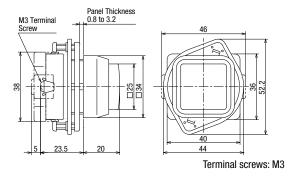
100 to 480V AC, 110V DC (Terminal Cover: N-VL3)



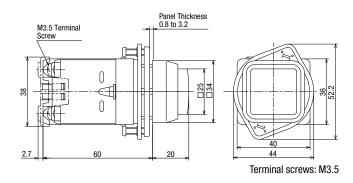
Terminal screws: M3.5

Square Extended UPQN3B

6V, 12V, 24V AC/DC (Terminal Cover: APN-PVL) Without LED Lamp



100 to 480V AC, 110V DC (Terminal Cover: N-VL3)



Rectangular (Marking) Flush Silhouette UPQN4

ø16

ø22

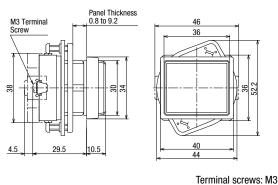
Miniature Pilot Lights

TWND

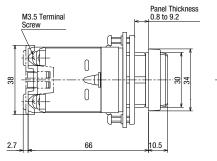
ARN

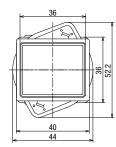
CS

6V, 12V, 24V AC/DC (Terminal Cover: APN-PVL) Without LED Lamp



100 to 480V AC, 110V DC (Terminal Cover: N-VL3)





Terminal screws: M3.5

• See B-349 for wiring.

Flush/Extended/Extended with Half Shroud/Extended with Full Shroud

Package Quantity: 1

Shape							Package Quantity: 1	ı = _
Filesh ARD 1 No	Shape	Operation	Contact	Part No. (Ordering No.)	Button Color Code	Dimensions	(All dimensions in mm.)	ights
Momentary Mome				ABD110N*				
Momentary Mome			1NC	ABD101N*				
2NO	AODI	Momentary	1NO-1NC	ABD111N*				APEM
200		Momoritary			S	Par0.8	to 7.5 ø39	Switches &
Maintained								
Maintained 1NO-1NC						4 4 4	s 1	Control Boxes
Maintained 1NO-1NC ADD111N- R			-					
Maintained 2NO				+		45.4 (1 or 2 blocks)	29.4	_ ·
Safety Products Safety Pro		Maintained				05.4 (5 01 4 blocks) 1 9 1	- 40 -	
Extended with Half Shroud AB0220N+ AB								Safety Products
Thick								l
ADD2 ADD22NN	Extended							Explosion Proof
Nonentary 1N0-1NC ABD211N+ 2N0 ABD220N+ S ABD220N+ ABB220N+ ABB22N+ ABB22N+ ABB22N+ ABB22N+ ABB22N+ ABB22N+ ABB22N+ ABB22N+								Terminal Blocks
ABD220N	AOD2		1NO-1NC	ABD211N*				Dalaya & Castrata
2NC ABD202N W		Momentary	2N0	ABD220N*	Y	Par	el Thickness	
No			2NC	ABD202N*			107.5	
1NO			2NO-2NC	ABD222N*	VV			Power Supplies
Maintained Maintained 1NO-1NC A0D211N= R 2NO A0D220N= 2NO A0D220N= 2NO A0D220N= 2NO A0D220N= 2NO A0D220N= 2NO ADD220N= 2NO				A0D210N*	R	4 a a	42 68	
Maintained 1NO-1NC AOD220N- 2NO AOD220N- 2NO-2NC AOD220N- 2NO-2NC AOD220N- 2NO-2NC ABGD21N- 2NO ABGD220N- 2NO-2NC ABGD220N- 2NO-2NC ABGD220N- 2NO-2NC ABGD220N- 2NO AOGD220N- 2NO AOGD						45.4 (1 or 2 blocks)	294	LED Illumination
Simple content		Maintained				65.4(3 or 4 blocks) 14	40	Controllers
Extended with Half Shroud ABGD2 1NC ABGD2 11N= 2NO ABGD2 20N= 2NO ABGD2 20N								Operator
Extended with Half Shroud ABGD210N+								
ABGD2 AGGD2 Momentary	Extended with Half Shroud							Sensors
A0GD2 Momentary No-1NC ABGD211N* R Y S W				+				AUTO-ID
Momentary 2NO ABGD22ON* 2NC ABGD22DN* 2NO-2NC ABGD22DN* 2NO-2NC AGGD22DN* 2NO AOGD21DN* 1NO-1NC AOGD21DN* 2NO AOGD22ON* 2NO-2NC AOGD22ON* 2NO-2NC AOGD22DN* 2NO-2NC AOGD22DN* 2NO AOFD21DN* 2NO ABFD21DN* 2NO ABFD21DN* 2NO ABFD21DN* 2NO ABFD21DN* 2NO ABFD22DN* 2NO ABFD22DN* 2NO AOFD22DN* 2NO AOFD	AOGD2			 				7.0.0.0
2NC ABGD202N* NO 2NO-2NC ABGD222N* NO AGD210N* 1NO AOGD21N* 2NO AOGD22N* 2NO AOFD21N* AOFD21N* 2NO ABFD22N* 2NO ABFD22N* 2NO ABFD22N* 2NO ABFD22N* 2NO AOFD22N* 2NO AOFD21N* AOFD21N* AOFD21N* AOFD21N* AOFD21N* AOFD21N* AOFD21N* AOFD21N* AOFD21N* AOFD22N*		Momentary				Panel	Thickness	
No							3.5 ø39	
NO					W			Flush Silhouette
Maintained				AOGD210N*	<u> </u>	4.4		a16
Maintained 1NO-1NC AOGD211N* 2NO AOGD220N* 2NO-2NC AOGD222N* 2NO-2NC AOGD222N* 2NO-2NC AOGD222N* AOFD21N* 2NO ABFD21N* 2NO ABFD220N* 2NO-2NC ABFD220N* 2NO-2NC ABFD220N* 2NO-2NC ABFD220N* 2NO-2NC ABFD22N* 2NO-2NC AOFD22N* 2NO-2NC			1NC	AOGD201N*				J
2NO		Maintained	1NO-1NC	AOGD211N*	R	40.9 (1 or 2 blocks) 18.5 60.9 (3 or 4 blocks) 20.5	29.4	ø22
2NC A0GD202N* 2NO-2NC A0GD222N*		wamameu		AOGD220N*				ø30
Extended with Full Shroud ABFD2 AOFD2 Momentary 1NO								
ABFD2 AOFD2 Momentary NC	F.44.4							Miniature ————————————————————————————————————
AOFD2 Momentary Momentary 1NC ABFD201N* 1NO-1NC ABFD221N* 2NO ABFD220N* 2NC ABFD220N* 2NO-2NC ABFD222N* 1NO AOFD210N* 1NC AOFD21N* 1NO-1NC AOFD21N* 2NO AOFD220N* 2NO AOFD220N* 2NO AOFD220N* 2NO AOFD220N* 2NO AOFD220N* 3NO AOFD220N* 3NO			ļ	-	В			Pilot Lights
Momentary 2NO ABFD220N* Y S W	AOFD2				G			
2NC ABFD202N* S W 2NO-2NC ABFD222N* 1NO AOFD210N* 1NC AOFD201N* 1NO-1NC AOFD211N* 2NO AOFD220N* 2NC AOFD202N* S W ACT AOFD202N* CS AOFD202N* AOFD202N* CS AOFD202N* AOFD2		Momentary					and Thinkness	
No						Par -11-		
1NO AOFD210N* 1NC AOFD201N* 1NO-1NC AOFD211N* 2NO AOFD220N* 2NC AOFD202N* NW AOFD202N* AO								TWN
Maintained No.				+		4	- 1 4 8 8 4 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TWND
Maintained 1N0-1NC A0FD211N* R								
Maintained 2NO A0FD220N* Y S W CS CS CS CS CS C				1		45.4 (1 or 2 blocks) 14		ARN
2NC A0FD202N* S W		Maintained			Υ	<u> </u>	** *** 	cs
2NO-2NC AOFD222N*								
			2NO-2NC	AOFD222N*	VV			

- Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow), S (blue), W (white)
- Round bezel (metal): Chrome-plated
- Pushbuttons with 1 or 3 contact blocks have a dummy block.
- See B-307 for other contact configurations and gold-plated silver contacts.
- See B-312 for bottom view.
- Terminal screws: M3.5
- Integrated terminal cover

ABD1, AOD1 with button color of B (black), G (green), or (R) red

Supply of color buttons B, G, R has been discontinued for ABD1/AOD1 without color code. When ordering, make sure to specify the required button color code.

Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors **Power Supplies** LED Illumination Controllers Operator

> Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature Pilot Lights

TWN

ARN CS

Mushroom/Mushroom with Full Shroud/Jumbo Mushroom/Jumbo Mushrooms with Shallow/Deep Shroud/Pin Lock

Shape	Operation	Contact	Part No.	Button Color Codo	Dimensions	(All dimensions in m
Mushroom		1NO	(Ordering No.) ABD310N*	Color Code		
ABD3		1NC	ABD301N*	B G		
AOD3	Momentary	1NO-1NC	ABD311N*	Ř		
	Williamary	2N0	ABD320N*	Y	Panel Thickness 0.8	to 7.5 29.4
		2NC 2NO-2NC	ABD302N* ABD322N*	S W		
		1NO	ADD322N* AOD310N*	В	414	{
		1NC	AOD301N*	G		
	Maintained	1NO-1NC	A0D311N*	R	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 22	40
	Maintainoa	2N0	AOD320N*	Y S		
		2NC 2NO-2NC	A0D302N* A0D322N*	W		
Mushroom with Full Shroud		1NO	ABGD310N*	В		
ABGD3		1NC	ABGD301N*	G	Panel Thickness 0.8	to 6.5 . 29.4 .
.0GD3	Momentary	1NO-1NC	ABGD311N*	R		
		2NO	ABGD320N*	Y S		
The state of the s		2NC 2NO-2NC	ABGD302N* ABGD322N*	W	848	(()
		1NO	AOGD310N*	В	39/10/29/10/29	
		1NC	AOGD301N*	G	43.9 (1 or 2 blocks) 63.9 (3 or 4 blocks) 23.5	40
	Maintained	1NO-1NC	AOGD311N*	R		
		2NO 2NC	AOGD320N* AOGD302N*	Y S		
		2NO-2NC	AOGD302N*	W		
lumbo Mushroom		1NO	ABD410N*			29.4
ABD4		1NC	ABD401N*		Panel Thickness 0.8 to 7.5	
		1NO-1NC	ABD411N*	В		- / d h
	Momentary			G R	4.14	
		2N0	ABD420N*	Ϋ́		
		2NC	ABD402N*		45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 29	
Jumbo Mushroom with		2NO-2NC	ABD422N*		Panel Thickness 0.8 to 7.5	29.4
Shallow Shroud		1NO	ABGD410N*			
ABGD4		1NC	ABGD401N*	В		
	Momentary	1NO-1NC	ABGD411N*	G R	965	
		2N0	ABGD420N*	Ϋ́		
		2NC	ABGD402N*		45.4 (1 or 2 blocks)	
umbo Mushroom with		2NO-2NC	ABGD422N*		65.4 (3 or 4 blocks) 29 Panel Thickness 0.8 to 7.5.	29.4
eep Shroud		1NO	ABFD410N*			
BFD4		1NC	ABFD401N*	В		
	Momentary	1NO-1NC	ABFD411N*	G	41.4	
	omortui y	2N0	ABFD420N*	R Y		
		2NC	ABFD402N*	·	45.4 (1 or 2 blocks)	
		2NO-2NC	ABFD422N*		65.4 (3 or 4 blocks) 33	40
Pin Lock (On-off Lock Type) (*1) ABD8P		1NO	ABD8P10N*			
אטעטר		1NC	ABD8P01N*	В		40
		1NO-1NC 2NO	ABD8P11N* ABD8P20N*	G R		29.4
		2NC	ABD8P2UN* ABD8P02N*	Y	Panel Thickness 0.8 to 7.5	<u> </u>
and the same	engly engly	2NO-2NC	ABD8P22N*	-		
Pin Lock (On-lock Type) (*1)		1NO	ABD8PN10N*		928	/ /(((-;-))) }
ABD8PN ABD8PN		1NC	ABD8PN01N*	В		
		1NO-1NC	ABD8PN11N*	G	15.4 (1 and blocks)	
18			 			
		2N0 2NC	ABD8PN20N* ABD8PN02N*	R Y	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 27.5	4

- Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow), S (blue), W (white)
- Round bezel (metal): Chrome-plated
- Pin Lock (On-lock type): Button can be locked in depressed position by inserting the pin (the button cannot be locked in reset position).
- Pushbuttons with 1 or 3 contact blocks have a dummy block.
- See B-307 for other contact configurations and gold-plated silver contacts.
- See B-342 for maintenance parts.
- *1) The pin for ABD8P is ø4.6 mm and is not compatible with ABN8P (old series).
- See B-312 for bottom view.
- Terminal screws: M3.5
- · Integrated terminal cover

Pushlock Turn Reset/Push Turn Lock/Pull/Push-Pull

Package Quantity: 1

					Package Quantity: 1	
Shape	Contact	Part No. (Ordering No.)	Button Color Code	Dimensions	(All dimensions in mm.)	t Lights
Mushroom Pushlock Turn Reset (*1) AVD3	1NO	AVD310N*				0,
AVDO	1NC	AVD301N*		Pane	Thickness 0.8 to 7.5	
	1NO-1NC	AVD311N*	R			APEM
	2N0	AVD320N*	Υ	4		Switches & Pilot Lights
	2NC	AVD302N*		45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 23.6	29.4	Control Boxe
	2NO-2NC	AVD322N*		- 03.4 (3 01 4 0100kg) sle 25.0	<u>'</u> → 10	Emergency Stop Switche
Mushroom Push Turn Lock AJD3	1NO	AJD310N*				Enabling Switches
AUDU	1NC	AJD301N*		Panel	Thickness 0.8 to 7.5	Safety Produ
	1NO-1NC	AJD311N*	B G		1 19	Explosion Pro
	2N0	AJD320N*	R Y	# B B B		
	2NC	AJD302N*	'	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 23.1	29.4	Terminal Blo
	2NO-2NC	AJD322N*		05.4 (3 OF 4 DIOCKS) 23.	5 40 40	Relays & Soci
Mushroom Pull AZD3	1NO	AZD310N*				Circuit Protectors
	1NO-1NC	AZD311N*	B G	Panel	Thickness 0.8 to 7.5	Power Suppli ———————————————————————————————————
	2N0	AZD320N*	R Y	4	a de la companya de l	Controllers
	2NC	AZD302N*		45.4 25.	1 5.5 stroke 29.4 40	Operator Interfaces
Mushroom Push-Pull (*2) AYD31	1NO-1NC	AYD3111N*		Panel	Thickness 0.8 to 7.5	Sensors AUTO-ID
	2N0	AYD3120N*	B G R	8	g g	
	2NC	AYD3102N*	Y	45.4 5.5 str	oke 29.4 40	Flush Silhoue ø16

- Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow)
- Round bezel (metal): Chrome-plated
- Pushbuttons with 1 or 3 contact blocks have a dummy block.
- See B-307 for other contact configurations and gold-plated silver contacts.
- Mushroom pull has up to 2 contact blocks.
- *1) Pushlock turn reset switches cannot be used as emergency stop switches. When emergency stop switches are required, use XN series emergency stop switches (ISO 13850 and IEC 60947-5-5 compliant).
- *2) Push-Pull switches with red button cannot be used as emergency stop switches. When emergency stop switches are required, use XN series emergency stop switches (ISO 13850 and IEC 60947-5-5 compliant).
- See B-312 for bottom view.
- Terminal screws: M3.5
- Integrated terminal cover

Pushbutton operation

Pushlock Turn Reset

Button is maintained when pressed and is reset when turned clockwise.

Button is locked when turned clockwise in the depressed position and is reset when turned counterclockwise.

Pulling the button operates the contacts, and releasing the button return the contacts.

2-position switches with button maintained in both depressed and reset positions.

Pull contact operation

· un contact operation										
Contact	AZD3									
Contact	Normal	Pull								
1NO	о' о	9.								
2NO-2NC	ი-ი ••	<u> </u>								
2N0	9,0 9,0	1° 1° 1°								
2NC	•••	616 616								

Push-Pull contact operation

Contact	AYD31								
Contact	Push	Pull							
1NO	ტ •_•	0 0 11							
2N0	9,9 9,9	00 00 T 00							
2NC	<u>.</u> .	aia aia							

Control Boxes

Emergency Stop Switches Enabling

Switches

Safety Products

Explosion Proof

Terminal Blocks Relays & Sockets

Protectors **Power Supplies**

LED Illumination

Flush Silhouette

ø22

Miniature

Pilot Lights

TWN

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CS

LED Illuminated Extended/Extended with Full Shroud

Package Quantity: 1

Lights	Shape	Base	Operation	Operating Voltage	Contact	Part No. (Ordering No.)	Button Color Code
0,	Extended				1NO-1NC	ALD22211DN*	
	ALD2			24V AC/DC	2N0	ALD22220DN*	7
	AOLD2				2NC	ALD22202DN*	R
APEM					1NO-1NC	ALD21611DN*	G
Switches &			Momentary	100/110V AC	2N0	ALD21620DN*	— Y — А
Pilot Lights					2NC	ALD21602DN*	S
Control Boxes					1NO-1NC	ALD22611DN*	PW
Emergency				200/220V AC	2N0	ALD22620DN*	
Stop Switches	(24V AC/DC)	BA9S			2NC	ALD22602DN*	
Enabling Switches	(211716/20)	DA95			1NO-1NC	A0LD22211DN*	
Safety Products				24V AC/DC	2N0	A0LD22220DN*	
Salety Products					2NC	A0LD22202DN*	R
Explosion Proof					1NO-1NC	A0LD21611DN*	G
			Maintained	100/110V AC	2N0	A0LD21620DN*	— Y — А
Terminal Blocks					2NC	A0LD21602DN*	S
Relays & Sockets					1NO-1NC	A0LD22611DN*	PW
Circuit	With transformer			200/220V AC	2N0	A0LD22620DN*	
Protectors	(100/110V AC)				2NC	A0LD22602DN*	
Power Supplies	Extended with Full Shroud				1NO-1NC	ALFD22211DN*	
томст опррпоз	ALFD2			24V AC/DC	2N0	ALFD22220DN*	
LED Illumination	AOLFD2				2NC	ALFD22202DN*	R
0					1NO-1NC	ALFD21611DN*	G
Controllers			Momentary	100/110V AC	2N0	ALFD21620DN*	_ Y А
Operator Interfaces					2NC	ALFD21602DN*	S
					1NO-1NC	ALFD22611DN*	PW
Sensors				200/220V AC	2N0	ALFD22620DN*	
AUTO-ID	(24V AC/DC)	BA9S			2NC	ALFD22602DN*	
	(211716/20)	DA95			1NO-1NC	AOLFD22211DN*	
				24V AC/DC	2N0	AOLFD22220DN*	
					2NC	AOLFD22202DN*	R
Flush Silhouette					1NO-1NC	AOLFD21611DN*	G
riusii Siiilouette			Maintained	100/110V AC	2N0	AOLFD21620DN*	⊢ γ
ø16					2NC	AOLFD21602DN*	⊢ A S
					1NO-1NC	AOLFD22611DN*	PW
ø22	With transformer			200/220V AC	2N0	AOLFD22620DN*	
ø30	(100/110V AC)				2NC	AOLFD22602DN*	7
	• Specify a color code in place of * in Part No. B (red). ((groop) V (vollow) A (ambor)	• Soo R-309 for	r other contact con	figurations and gold-plated silver	contacte

- Specify a color code in place of * in Part No. R (red), G (green), Y (yellow), A (amber), S (blue), PW (pure white)
- Illuminated pushbuttons have an LED lamp installed.
- · Round bezel (metal): Chrome-plated

ALD2/AOLD2 (terminal screws M3.5)

- See B-308 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.
- See B-308 for other contact configurations and gold-plated silver contacts.

110V DC, 380V AC or over

110V DC, 380V AC or over

- Illuminated pushbutttons of 24V AC/DC or below with 2 or 4 contact blocks have a dummy block.
- See B-314 for bottom view.

Dimensions

TWN

Miniature

Pilot Lights

6, 12, 24V AC/DC · Without LED Lamp ARN

CS

Extended, LED illuminated (momentary/maintained)

100/110V AC, 200/220V AC (240V AC or below)

Integrated terminal cover

Extended with Full Shroud, LED illuminated (momentary/maintained) ALFD2/AOLFD2 (terminal screws M3.5) Integrated terminal cover

6, 12, 24V AC/DC · Without LED Lamp

Panel Thickness 0.8 to 6

100/110V AC, 200/220V AC (240V AC or below)

Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors **Power Supplies** LED Illumination Controllers Operator Interfaces Sensors AUTO-ID

LED Illuminated Mushroom (ø40)/Mushroom Pushlock Turn Reset

Package Quantity: 1

Shape	Base	Operation	Operating Voltage	Contact	Part No. (Ordering No.)	Color Code
Mushroom (ø40)				1NO-1NC	ALD32211DN*	
ALD3			24V AC/DC	2N0	ALD32220DN*	7
AOLD3				2NC	ALD32202DN*	-
				1NO-1NC	ALD31611DN*	⊢ R
		Momentary	100/110V AC	2N0	ALD31620DN*	Ϋ́
		·		2NC	ALD31602DN*	R G Y A S
				1NO-1NC	ALD32611DN*	5
			200/220V AC	2N0	ALD32620DN*	
(24V AC/DC)	DAGC			2NC	ALD32602DN*	
, ,	BA9S			1NO-1NC	A0LD32211DN*	
The state of the s		Maintained	24V AC/DC	2N0	AOLD32220DN*	
				2NC	AOLD32202DN*	R
				1NO-1NC	AOLD31611DN*	R G Y A W
			100/110V AC	2N0	AOLD31620DN*	Y
				2NC	A0LD31602DN*	
				1NO-1NC	A0LD32611DN*	S
With transformer			200/220V AC	2N0	AOLD32620DN*	
(100/110V AC)				2NC	AOLD32602DN*	
Mushroom Pushlock Turn Reset (*1)				1NO-1NC	AVLD32211DN*	
AVLD3			24V AC/DC	2N0	AVLD32220DN*	
				2NC	AVLD32202DN*	
				1NO-1NC	AVLD31611DN*	
	BA9S	_	100/110V AC	2N0	AVLD31620DN*	R
				2NC	AVLD31602DN*	
				1NO-1NC	AVLD32611DN*	
(24V AC/DC)			200/220V AC	2N0	AVLD32620DN*	_
, , , ,				2NC	AVLD32602DN*	

- Specify a color code in place of * in Part No. R (red), G (green), Y (yellow), A (amber), S (blue)
- Illuminated pushbuttons have an LED lamp installed.
- Round bezel (metal): Chrome-plated
- See B-308 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.
- See B-308 for other contact configurations and gold-plated silver contacts.
- Illuminated pushbutttons of 24V AC/DC or below with 2 or 4 contact blocks have a dummy block.
- *1) Pushlock turn reset switches cannot be used as emergency stop switches. When emergency stop switches are required, use XN series emergency stop switches (ISO 13850 and IEC 60947-5-5 compliant).
- See B-314 for bottom view.

Illuminated pushbutton operation

Pushlock Turn Reset

Dimensions

Button is maintained when pressed and is reset when turned clockwise.

Flush Silhouette

ø16

ø22

TWN

ARN

CS

Miniature

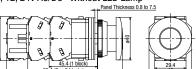
Pilot Lights

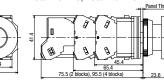
Mushroom, LED illuminated (momentary/maintained)

ALD3/AOLD3 (terminal screws M3.5)

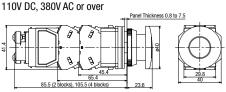
6, 12, 24V AC/DC · Without LED Lamp

Integrated terminal cover 100/110V AC, 200/220V AC









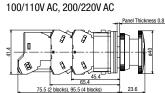
Mushroom Pushlock Turn Reset, LED illuminated

AVLD (terminal screws M3.5)

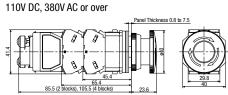
Integrated terminal cover

6, 12, 24V AC/DC · Without LED Lamp









ASD Selector Switches (Knob Operator)

Package Quantity: 1

Knob Operator ASD Shape APEM Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors **Power Supplies** LED Illumination Controllers Operator Sensors AUTO-ID Flush Silhouette ø22 Miniature Pilot Lights TWN

Contact Configuratio	n	Maintained	
	Operator		

		Contact C	onfiguratio	n			Maintained	Spring Return from Right		Spring I	from L	Left	
		Contact	Block		perat Positio		1 2	1 2	Contact	Block	Oper Posi	rator ition	1, 2
	Contact	Mounting Position	Contact	1	2				Mounting Position	Contact	1	2	
	1NO	①	NO		•		40004011	100044011	①	NO	•		40000401
90°	(10)	2	_	Dun	nmy B	lock	ASD210N	ASD2110N	2	_	_	_	ASD2210N
2-position	1NO-1NC	①	NO		•		ACDOMAN	ACDOMAN	0	NO	•		ACDOOLIN
	(11)	2	NC	•			ASD211N	ASD2111N	2	NC		•	ASD2211N
	2N0	①	NO		•		ASD220N	ASD2120N	①	NO	•		Vedasavi
	(20)	2	NO		•		ASDZZUN	ASDZTZUN	2	NO	•		ASD2220N
		①	NO		•				①	NO	•		
	2NO-2NC	2	NC	•			ASD222N	ASD2122N	2	NC		•	ASD2222N
	(22)	3	NO		•		AODZZZN	AUDZIZZN	3	NO	•		AUDZZZZN
		4	NC	•					4	NC		•	
		Contact C	onfiguratio	n			Maintained	Spring Return from Right	S	Spring Retu from Left	rn		Spring Return Two-way
	Contact	Contact	Block		perat Positio		1 0 2	1 0 2		1 0 2			1 0 2
	Contact	Mounting Position	Contact	1	0	2		<u> </u>					
	2N0	①	NO	•			ASD320N	ASD3120N		ASD3220N	ı		ACDOOON
	(20)	2	NO			•	AODOZON	A000120N		AODOZZON	•		ASD3320N
	2NC	①	NC				ASD302N	ASD3102N		ASD3202N	ı		ASD3302N
	(02)	2	NC				7.02002.1	7.020.702.1					AODOGOZN
		①	NO	•									
	2NO-2NC	2	NO			•	ASD322N	ASD3122N		ASD3222N	ı		ASD3322N
15°	(22)	3	NC										AODOOZZIV
3-position		4	NC										
		①	NO	•		_							
	4NO	2	NO NO			•	ASD340N	ASD3140N		ASD3240N	ı		ASD3340N
	(40)	3	NO NO	•									7.0200.1011
		4	NO NO										
		①	NC	_									
	4NC	2	NC				ASD304N	ASD3104N		ASD3204N	I		ASD3304N
	(04)	3	NC	_									
		4	NC			_							
		①	NO NO	•									
	☆ 3S	2	NO NC			•	ACDOOCN OAD	_		_			_
	38	3	NC	Dur	•	امماد	ASD33SN-243						
		4		ן Dun	ımy B	IOCK							

Nnob: Black

ARN

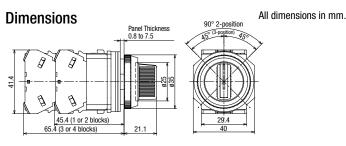
CS

- Round bezel (metal): Chrome-plated
- Selector switches with 1 or 3 contact blocks have a dummy block.
- Knob operator can be installed at every 45 degrees intervals in addition to the positions shown in the above table.
- See B-321 to B-322 for other contact configurations.

- Turn the operator to each position accurately.
- Selector switches with ☆ have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.
- See B-308 for gold-plated silver contacts.
 See B-312 for bottom view.
- See B-312 for bottom view.

Contact Block Mounting Position





Terminal Screws: M3.5 Terminal cover: integrated

Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature Pilot Lights

TWN

ARN CS

ASD□L Selector Switches (Lever Operator)

Package Quantity: 1

Shape	Lever Opera ASD□L	ator											ratkaye Quantity. I		
		Contact C	Configurat	ion			Maintained	Spring Return from Right	Spring Return from Left						
	Contact	Contact Block		Block Operator Position		1 2	1 -2	Contact	CONTROCT BLOCK		rator ition	1 2			
	Contact	Mounting Position	Contact	1	2				Mounting Position	Contact	1	2			
	1N0	0	NO	— Dumn		•			ASD2L10N	ASD21L10N	1	NO	•		ASD22L10N
90°	(10)	2				ock	AUDZETUN	AUDZILIUN	2	_	_		NODLELIUM		
2-position	1NO-1NC	0	NO		•		ASD2L11N	ASD21L11N	①	NO	•		ASD22L11N		
	(11)	2	NC	•			//ODEE/ III	7.002.121.11	2	NC		•	71002221111		
	2N0	0	NO		•		ASD2L20N	ASD21L20N	①	NO	•		ASD22L20N		
	(20)	2	NO		•				2	NO	•				
		0	NO	_	•				①	NO	•	_			
	2NO-2NC	2	NC	•			ASD2L22N	ASD21L22N	2	NC		•	ASD22L22N		
	(22)	3	NO NO	_					3	NO	•	_			
		4	NC	•	Ш			One in a D. I	4	NC		•	0		
	Contact Configuration						Maintained	Spring Return from Right	Sprin	g Return fr	om Le	eft	Spring Return Two-way		
	Contact B		ct Block Operator Position			ir 1	1 0 2	1 0 2		1, 0	1, 0, 2				
	Contact	Mounting Position	Contact	1	2					$\overline{}$					
	2N0	①	NO	•			ASD3L20N	ASD31L20N		ASD32L20	DN .		ASD33L20N		
	(20)	2	NO			•	AODOLLON	AODOTEZON			-11		AODOULEUN		
	2NC	0	NC				ASD3L02N	ASD31L02N		ASD32L02	2N		ASD33L02N		
	(02)	2	NC												
		0	NO	•											
	2NO-2NC	2	NO			•	ASD3L22N	ASD31L22N		ASD32L22	2N		ASD33L22N		
45°	(22)	3	NC	_											
3-position		4	NC												
		0	NO NO	•											
	4NO	2	NO NO			•	ASD3L40N	ASD31L40N		ASD32L40	ON		ASD33L40N		
	(40)	3	NO NO	•											
		4	NO NC			•									
		0	NC												
	4NC (04)	2	NC NC				ASD3L04N	ASD31L04N		ASD32L04	1N		ASD33L04N		
	(04)	3	NC NC												
		4	NO NO												
		① ②	NO NO	•		•	☆								
	☆ 3S		NC NC				ASD3L3SN-243	_	. _		_				
	33	3		Dur	nmy Bl	ook									
	4 — Dun					UCK									

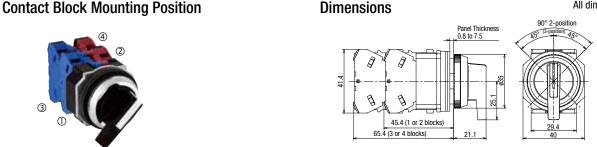
- Lever: Black

- Round bezel (metal): Chrome-plated
 Selector switches with 1 or 3 contact blocks have a dummy block.
 Knob operator can be installed at every 45 degrees intervals in addition to the positions shown in the above table.
- \bullet Turn the operator to each position accurately. \bullet Selector switches with \thickapprox have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.

 • See B-308 for gold-plated silver contacts.
- See B-312 for bottom view.

Dimensions

All dimensions in mm.



Terminal Screws: M3.5 Terminal cover: integrated

■ Download catalogs and CAD from http://asia.idec.com/downloads

Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors **Power Supplies** LED Illumination Controllers Operator

> Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature Pilot Lights

TWN

ARN CS

ASD□K Key Selector Switches

Package Quantity: 1

													Package Quantity:
Shape	Key Select ASD□K	or (Key No.	0)										
		Contact (Configurat	tion			Maintained	Spring Return from Right		Spri	ng Re	turn fro	m Left
_ -	Contact	Contact	t Block	C	perat Positio	or n	1 2	1 .2	Contact	Block		rator ition	2 جد1
<u>. </u>	Contact	Mounting Position	Contact	1	2				Mounting Position	Contact	1	2	
	1N0	①	NO		•		ACDOV10N	ACDO4V40N	1	NO	•		ACDOOK 1 ON
90°	(10)	2	_	Dur	nmy E	Block	ASD2K10N	ASD21K10N	2	_	-	_	ASD22K10N
2-position	1NO-1NC	①	NO		•		ACDOV11N	ACDO1V11N	①	NO	•		ACDOOK11N
	(11)	2	NC	•			ASD2K11N	ASD21K11N	2	NC		•	ASD22K11N
	2N0	①	NO		•		ASD2K20N	ASD21K20N	①	NO	•		ASD22K20N
- t	(20)	2	NO		•		ASDZRZUN	ASDZTRZUN	2	NO	•		ASDZZKZUN
		①	NO		•				①	NO	•		
	2NO-2NC	2	NC	•			ASD2K22N	ASD21K22N	2	NC		•	ASD22K22N
-	(22)	3	NO		•]	AODZINZZIN	AODZINZZN	3	NO	•		AODZZNZZN
		4	NC	•					4	NC		•	
-		Contact	Configura	tion			Maintained	Spring Return from Right	Sprin	g Return fi	Spring Return Two-way		
		Contac		Oper	ator Po	sition	1 0 2	1 0 - 2		1, 0	2		1, 0, 2
-	Contact	Mounting Position	Contact	1	2					$\overline{}$			
)	2N0	1	NO	•			ASD3K20N	ASD31K20N		ASD32K2	ON		ASD33K20N
_	(20)	2	NO			•	710DOTEOIT	Nobolitzon		TIODOLINE			710000112011
	2NC	①	NC				ASD3K02N	ASD31K02N		ASD32K0	2N		ASD33K02N
_	(02)	2	NC										
		①	NO	•									
-	2NO-2NC	2	NO		<u> </u>		ASD3K22N	ASD31K22N		ASD32K2	2N		ASD33K22N
_	(22)	3	NC	_									
45° 3-position		4	NC										
o position		0	NO	•		-							
	4NO	2	NO	_		•	ASD3K40N	ASD31K40N		ASD32K4	ON		ASD33K40N
	(40)	3	NO	•		_							
=	-	4	NO		-				+				
_		0	NC	_	<u> </u>								
	4NC (04)	2	NC				ASD3K04N	ASD31K04N		ASD32K0	4N		ASD33K04N
	(04)	3	NC										
	\vdash	4	NC	-					+				
		0	NO NO	-			☆						
	☆ 3S	2	NO NC		•	•	ASD3K3SN-243	_		_			_
	33	<u>3</u>	- NC	Dur		Slock							
		(4)		Dul	nmy E	DIUCK							

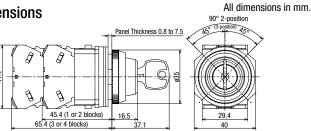
- · Cylinder: Chrome-plated
- · Round bezel (metal): Chrome-plated
- Key selector switches with 1 or 3 contact blocks have a dummy block.
- On spring-returned types, the key can be released only from the maintained position. On maintained types, the key can be released from every position. See $\hbox{\ensuremath{B}-308}$ for specifying key retained positions.
- Key selector switch is supplied with two standard keys.
- (1) Insert the key completely before turning the key, otherwise failure will result.

- (2) Turn the operator to each position accurately.
 Different key number is available upon request. Contact IDEC.
 Selector switches with have a half contact operating current (load switching current) value). Rated insulation voltage and rated current remain the same.
- See B-308 for gold-plated silver contacts.
 See B-312 for bottom view.

Contact Block Mounting Position



Dimensions



Terminal Screws: M3.5

Terminal cover: integrated

Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces Sensors AUTO-ID

ASLD Illuminated Selector Switches (LED)

Illuminated Selector Switches (BA9S Base)

Package Quantity: 1

Shape	ASLD			•			,									
		Contact	Configure	tion				(24V AC/DC)	Contra Data Com Di 11		Cnri	na Da	turn f	rom Left		
			Configura	_)perat	or		Maintained	Spring Return from Right			_	rator			
	Contact	Contac	t Block		Positio		Operating Voltage	1 2	1 , 2	Contact	t Block		ition	1 2	Color Code	
	Contact	Mounting Position	Contact	1	2		Vollago			Mounting Position	Contact	1	2		Oodc	
	4110 4110	1	NO		•		24V AC/DC	ASLD22211DN*	ASLD212211DN*	①	NO	•		ASLD222211DN*		
	1NO-1NC (11)	2	NC	•			100/110V AC	ASLD21611DN*	ASLD211611DN*	2	NC		•	ASLD221611DN*		
90°	(1.1)						200/220V AC	ASLD22611DN*	ASLD212611DN*					ASLD222611DN*		
2-position	2N0	1	NO		•		24V AC/DC	ASLD22220DN*	ASLD212220DN*	1	NO	•		ASLD222220DN*	R	
	(20)	2	NO		•		100/110V AC	ASLD21620DN*	ASLD211620DN*	2	NO	•		ASLD221620DN*	Y	
	(-,						200/220V AC	ASLD22620DN*	ASLD212620DN*					ASLD222620DN*	A S	
		1	NO		•		24V AC/DC	ASLD22222DN*	ASLD212222DN*	1	NO	•		ASLD222222DN*	. PW	
	2NO-2NC	2	NC	•			100/110V AC	ASLD21622DN*	ASLD211622DN*	2	NC		•	ASLD221622DN*		
	(22)	3	NO		•		200/220V AC	ASLD22622DN*	ASLD212622DN*	3	NO	•		ASLD222622DN*		
		4	NC	•			_		_	4	NC		•	_		
		Contact	Configura	tion				Maintained	Spring Return from Right	Spring	Return fr	om L	eft	Spring Return Two-way		
	.	Contac	t Block	Opera	ator Po	sition	Operating Voltage	1 0 2	1 0 2		1,0 2	2		1, 0, 2	Color Code	
	Contact	Mounting Position	Contact	1	0	2	95				\bigvee					
		1	NO	•			24V AC/DC	ASLD32220DN*	ASLD312220DN*	ASLI	D322220	DN*		ASLD332220DN*		
	2N0 (20)	2	NO			•	100/110V AC	ASLD31620DN*	ASLD311620DN*	ASLI	D321620	DN*	:	ASLD331620DN*		
	(20)						200/220V AC	ASLD32620DN*	ASLD312620DN*	ASLI	D322620	DN*		ASLD332620DN*		
	0110	①	NC				24V AC/DC	ASLD32202DN*	ASLD312202DN*	ASLI	D322202	DN*	:	ASLD332202DN*		
	2NC (02)	2	NC				100/110V AC	ASLD31602DN*	ASLD311602DN*	ASLI	D321602	:DN*	:	ASLD331602DN*		l
	(02)						200/220V AC	ASLD32602DN*	ASLD312602DN*	ASLI	D322602	DN*	:	ASLD332602DN*		
45°		1	NO	•			24V AC/DC	ASLD32222DN*	ASLD312222DN*	ASLI	D322222	:DN*	:	ASLD332222DN*		l
3-position	2NO-2NC	2	NO			•	100/110V AC	ASLD31622DN*	ASLD311622DN*	ASLI	D321622	:DN*		ASLD331622DN*	RG	
	(22)	3	NC				200/220V AC	ASLD32622DN*	ASLD312622DN*	ASLI	D322622	DN*	:	ASLD332622DN*	Υ	
		4	NC				_		_					_	A S	
		1	NO	•			24V AC/DC	ASLD32240DN*	ASLD312240DN*	ASLI	D322240	DN*	:	ASLD332240DN*	PW	l
	4N0	2	NO			•	100/110V AC	ASLD31640DN*	ASLD311640DN*	ASLI	D321640	DN*		ASLD331640DN*	"	
	(40)	3	NO	•			200/220V AC	ASLD32640DN*	ASLD312640DN*	ASLI	D322640	DN*	:	ASLD332640DN*		
		4	NO			•	_		_					_		
		1	NC				24V AC/DC	ASLD32204DN*	ASLD312204DN*	ASLI	D322204	DN*	:	ASLD332204DN*		
	4NC	2	NC				100/110V AC	ASLD31604DN*	ASLD311604DN*	ASLI	D321604	DN*	:	ASLD331604DN*		
	(04)	3	NC				200/220V AC	ASLD32604DN*	ASLD312604DN*	ASLI	D322604	DN*	:	ASLD332604DN*		
		4)	NC		_	1	1		I	I				1	1	ı

- Specify a color code in place of * in Part No.
- R (red), G (green), Y (yellow), A (amber), S (blue). PW (pure white)
 Round bezel (metal): Chrome-plated
- Illuminated selector switches have an LED lamp installed.
- Use a pure white (PW) LED for yellow (Y) illumination.
 See B-309 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.
- Illuminated selector switches of 24V AC/DC or below with 2 or 4 contact blocks have a
- Turn the operator to each position accurately. • See B-309 for gold-plated silver contacts.
- See B-314 for bottom view.

dummy block.

ARN CS

TWN

Flush Silhouette

ø16 ø22

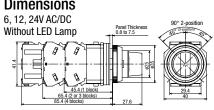
Miniature Pilot Lights

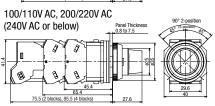
All dimensions in mm.

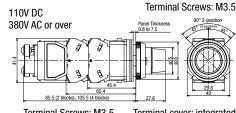
Contact Block Mounting Position Dimensions











Terminal Screws: M3.5 Terminal cover: integrated

ASBD2 Selector Pushbuttons

Package Quantity: 1

Shape	Contact Configuration	Circuit Code	Con Blo		Left	Ring F	Position	Right	Button Color Code	Ring Operator
			Mounting Position	Contact	Normal	Push Push	button Normal	Push	0000	Part No. (Ordering No.)
Ring Operator (90°2-position) ASBD2	11	A03	①	NO		•		•	B G	AODDOM N. AOO
	(1NO-1NC)	AU3	2	NC	•				R Y	ASBD211N-A03*
			①	NO		•		•		
		A08	2	NC	•					ASBD222N-A08*
			3	NO NO		•		•		7.055===1.7.00
4000			41	NC NO	•	•		•		
			2	NO						
		☆ C10	3	NC	•					☆ ASBD222N-C10*
		010	4	NC						
			①	NO		•			R	
	22	D10	2	NO				•	B G R	ASBD222N-D10*
	(2NO-2NC)	וטוט	3	NC	•				R Y	A3DD222N-D10*
			4	NC			•		Y	
			①	NO NO		•				
		☆ E10	2	NO NC				_		☆ ASBD222N-E10*
		EIU	<u>3</u>	NC NC						ASRDZZZN-E10*
			①	NO				•		
		,	2	NO		•				
		☆ F10	3	NC			•			☆ ASBD222N-F10*
			4	NC	•					

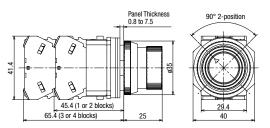
- Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow)
- Bezel (metal): Chrome-plated
- Circuit codes E and F: The right and left NC contact blocks on circuit code E or F may overlap each other while turning the ring operator. The NO and NC contact blocks on circuit code F may overlap each other while pressing the button.
- When using the selector pushbutton, do not turn the ring operator with the pushbutton depressed. Otherwise, damage or failure may be caused.
- Selector switches with 🛱 have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.
- See B-312 for bottom view.

Contact Block Mounting Position



Dimensions Ring operator (90° 2-position)

All dimensions in mm.



Terminal Screws: M3.5 Terminal cover: integrated

Pilot Ligh

Control Boxes

Emergency Stop Switches Enabling

Safety Products

Switches

Explosion Proof

Terminal Blocks

Relays & Sockets

Circuit Protectors

Power Supplies

LED Illumination
Controllers

Operator

Sensors

AUTO-ID

Flush Silhouette

420

Miniature

Pilot Lights

TWN

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Control Boxes

Emergency Stop Switches

Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit

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Protectors

Controllers

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Interfaces

Power Supplies LED Illumination

Pilot Lights (Round)

Package Quantity: 1

	Shape	Illumination	Base	Operating Voltage	Part No. (Ordering No.)	Color Code	LED Lamp Part No.
Round APD1				24V AC/DC	APD122DN*	R, G, Y, A, S, PW	LSRD-2
	(LED	BA9S	100/110V AC	APD116DN*	R, G, Y, A, S, PW	LSRD-6
	(24V AC/DC)			200/220V AC	APD126DN*	R, G, Y, A, S, PW	LOND-0

• Specify a color code in place of * in Part No.

R (red), G (green), Y (yellow), A (amber), S (blue), PW (pure white)

Round bezel (metal): Chrome-plated

• Pilot lights have an LED lamp installed.

- See B-309 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.
 See B-309 for how to specify units without LED lamps.
 Terminal cover is installed on pilot lights for electric shock prevention.

Type	Terminal Cover	Quantity
6V, 12V, 24V AC/DC	APN-PVL	1
100V/110V AC, 200/220V AC	N-VL3	1
110V DC	N-VL3	1

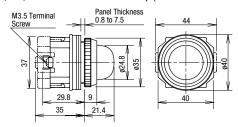
Note: DC-DC converter types are not approved by UL and CSA, and not CE compliant.

• See B-314 for bottom view.

Dimensions

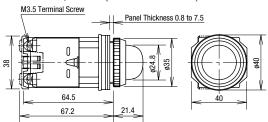
Round, LED illuminated

6V, 12V, 24V AC/DC · Without LED Lamp (Terminal Cover: APD-PVL)



Terminal Screws: M3.5

100 to 480V AC, 110V DC (Terminal Cover: N-VL3)



Terminal Screws: M3.5

All dimensions in mm.

ø22

ø16

Miniature

Flush Silhouette

Pilot Lights

TWN

ARN

CS

• See B-349 for wiring.

Control Boxes

Emergency
Stop Switches

Enabling
Switches

Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

Circuit
Protectors

Power Supplies

LED Illumination

Controllers

Operator

Nameplates

	Model	Legend	Material	Part No.	Ordering No.	Package Quantity	Dimensions (mm)
	NA	Blank		NA-0	NA-0	1	. 401.2
Л 3.		DIAIIK	Aluminium 1.2 mm thick	1210	NA-0PN10	10	24.5
S		With	White letters on black With background	NA-□	NA-□	1	9 030.5
y s g	For TWN/TWND	Legend			NA-□PN10	10	1 (100000
s s — of	NALO	Blank	Aluminium	NALO	NALO	1	40 11.2
s — s — t	Cost DIANTEMAN		1.2 mm thick Black	NALU	NALOPN10	10	930.5
s I	For TWN/TWND						

Specify a legend code in place of $\hfill\Box$ in the Ordering No.

Legends

□: Code	Legend
1	ON
2	0FF
3	START
4	STOP
31	OFF ON
35	HAND AUTO
53	HAND OFF AUTO

Flush Silhouette

Sensors AUTO-ID

ø16

ø22

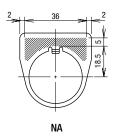
Miniature

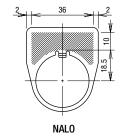
Pilot Lights



ARN

Shape and Engraving Area





All dimensions in mm.

Example (when the legend height is 4 mm)

Shape		ng Area m)	Max. No. of Lines	No. of Letters on	
	Height Width		OI LINES	1 Line	
NA	5	36	1	14	
NALO	10	36	2	14	

Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof**

Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator

Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature Pilot Lights

ARN CS

Accessories

		-	Ordering	Package	
Shape	Material	Part No.	No.	Quantity	Remarks
Locking Ring Wrench B A For TWN/TWND	Nitril rubber (black)	OR-12	OR-12	1	Used to tighten the round bezel when installing the ø30 or ø25 switch onto a panel from the front. A: TWS series (ø25) B: TWN/TWND series (ø30) A B B B B B B B B B B B B
Lamp Holder Tool A For TWN/TWND	Nitril rubber (black)	OR-55	OR-55	1	Used to install and remove the LED/incandescent lamps. See B-345. A: For BA9S base B: For E12 base A OR-55 See B-345. A: For BA9S base B: For E12 base A B B B B B B B B B B B B
Contact Block Removal Tool For TWN	Metal (zinc-plated) Rubber (nitryl)	TW-KC1	TW-KC1	1	Used to remove transformer units. See B-347 for how to use. 130 28
Contact Rubber Boot For momentary 1 layer of contact blocks (2 contact blocks)	Nitril rubber (black)	0C-99	OC-99	1	Rubber boot used to prevent oil and dirt from entering into the contact block. Temperature range: —5 to +60°C When inserting a cable, cut the projection on the cover to match
For TWN					when inserting a cable, cut the projection on the cover to match the cable size.
Anti-rotation Ring For TWN/TWND	Metal (diecast) (zinc-plated)	OGL-11	OGL-11PN10	10	Used to prevent the operator from turning. Generally used when using no nameplates on selector switches and selector pushbuttons. See B-345 for installation. Cannot be used for pin lock.
Rubber Mounting Hole Plug	Nitril rubber (black)	0B-13B	0B-13BPN05	_ 5	Used to plug unused ø30.5 mm mounting holes. Degree of protection: IP40
For TWN/TWND	Nitril rubber (gray)	0B-13	0B-13PN05		@30 \ @34 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Plastic Mounting Hole Plug For TWN/TWND	Plug: ABS plastic (gray) Gasket: Chloroprene rubber Locking ring: diecast zinc	0BP-11	OBP-11	1	Tightening torque: 1.2 N·m. Degree of protection: IP65 (when there is no anti-rotation ring hole) Supplied with a locking ring. Gasket M30 ^{P1.5} Screw Locking Ring
Metallic Mounting Hole Plug For TWN/TWND	Plug: ABS plastic (gray) Gasket: Chloroprene rubber Locking ring: diecast zinc	0B-11	0B-11	1	Tightening torque: 1.2 N·m. Degree of protection: IP65 (when there is no anti-rotation ring hole) Supplied with a locking ring. Gasket M30 ^{P1.5} Screw Locking Ring

Control Boxes

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Flush Silhouette

ø16 ø22

Miniature Pilot Lights

ARN

Accessories All dimensions in mm.

Shape		Material	Pa	rt No.	Ordering No.	Package Quantity	Remarks
Button Cover for Exte Pushbuttons	nded		Black	0C-11B	0C-11B		Metallic bezels covered with a rubber boot to enhance waterproof characteristics.
		Nitril rubber	Red	0C-11R	0C-11R	1	Button is not included. Applicable to extended pushbuttons only. Oil-proof Operating temperature:
		Bezel: diecast zinc	Green	0C-11G	0C-11G		-5 to +60°C.
Fc	or TWN/TWND		Yellow	0C-11Y	0C-11Y		/ MOUT1.3
	For flush pushbuttons	EDDM mubb on	0C-12 ⁻	1	0C-121	1	Used to cover and protect push- buttons where units are subject to water splash. Not suitable for outdoor use or where the units are
- For TWN/TWND	For extended pushbuttons	- EPDM rubber	0C-122	2	0C-122	1	subject to oil splash. Part No.
Dust-proof Rubber Co							Used for ABN4G and ABGD4 pushbuttons. Panel Thickness 1.2 to 5.5
- - - Fo	or TWN/TWND	Nitril rubber (black)	OC-4G	N	OC-4GN	1	
Padlock Cover							Used to protect pushbuttons and illuminated pushbuttons (momentary/maintained) with 24 mm max. height from the panel,
- Fc	For TWN/TWND		OL-KL1	1	OL-KL1	1	and selector switches (knob operator). • Not used for the following models. Pushbuttons Mushroom with full shroud Mushroom Jumbo mushroom with shroud Illuminated Pushbuttons With half shroud With full shroud Selector Switches Lever operator Key selector switch with key installed • Not used for the following models. Panel Thickness 0.8 to 3.2 Panel Thickness Naterproof Rubber Rubber Rubber Sasket 0.5t 10.5t
Padlock Cover for Key Selector Switche	s						Applicable model Key selector switches ASN□K/ASD□K See padlock cover catalog for operating instruction. Materia: SPCC 1.6 mm-thick Red paint
		Metal Paint: red (zinc-plated brass)	HS9Z-I	PC30	HS9Z-PC30	1	Rivet: Steel Material: SPCC 2mm-thick 58 8 37 27.5 4 R4
For Flush Pushbutton	s s						Used to protect flush pushbuttons from inadvertent operation.
		Metal (zinc-plated brass)	OL-C		OL-C	1	• Can be easily attached using the locking ring.
L Fo	or TWN/TWND						'

Accessories

							, 2
Shape		Material	Part No.	Ordering No.	Package Quantity	Remarks	llot Lights
Metallic Bezel							S
		Metal				Cannot be used with pin lock,	APEM
		(diecast zinc: chrome-plated)	0G-11	0G-11PN02	2	selector pushbuttons, and monolever units.	Switches & Pilot Lights
							Control Boxes
ø35/ø26, height 9 For TW Plastic Bezel	/N/TWND						Emergency Stop Switches
Flasiic dezei							Enabling Switches
						 Specify a color code in place of *. B (black), G (green), R (red), W (white), 	Safety Products
		Polycarbonate	0GP-11*	0GP-11*PN02	2	Y (yellow) • Cannot be used with pin lock, selector	Explosion Proof
						pushbuttons, and monolever units.	Terminal Blocks
ø35/ø26, height 9	For TWN						Relays & Sockets
Octagonal Metal Bezel	①						Circuit Protectors
	Flush W35		0G-81	0G-81PN02	2		Power Supplies
	(37.6) H9		00 01	00 011 1102	_		LED Illumination
<u> </u>		Metal (diecast zinc:				 Use with TWDN series diecast zinc switches and pilot lights. 	Controllers
	② Extended	chrome-plated)				Cannot be used with half-shrouds.	Operator Interfaces
W35			0G-82	0G-82	1		Sensors
	(37.6) H16						AUTO-ID
For TWDN Clear Plastic Shroud for Flush Pushbu	ittons						
		Acrylic (clear)	0GP-13	0GP-13PN02	2		Flush Silhouette
		Aciyiic (cicai)	OGF-13	00F-13FN02	2		ø16 ————————————————————————————————————
405 haishi 4.4	F TMA						ø22
ø35, height 14 Clear Plastic Shroud for Extended Pus	For TWN shbuttons					Clear plastic full shroud.	ø30
							Miniature
		Asydia (alasy)	00D 14	0GP-14PN02			Pilot Lights
		Acrylic (clear)	0GP-14	0GP-14PN02	2		
							TMN
ø35, height 20.6 Clear Plastic Shroud for Illuminated Push	For TWN						TWN
ologi i idado omoda foi marimatoa i don	ibuttorio						TWND
							ARN
		Acrylic (clear)	0GP-1411	0GP-1411	1	 Buttons may protrude slightly depending on the panel thickness. 	CS
Shroud: ø35, height 20.6 Metal Nut Ring: height 4	For TWN						
Metal Nut Ring for Illuminated Pushbu							
		Metal	0L-11	OL-11PN05	5	Metal nut ring for OGP-1411 only.	
		(diecast zinc)				·	
ø35, height 4	For TWN						
200, Holgitt T	. J WIN	l	L	1	1		I

Accessories

All dimensions in mm

:Lights	Shape		Material	Part No.	Ordering No.	Package Quantity	Color Code *
S	Button for Pushbuttons	① Flush		ABN1BN-*	ABN1BN-*PN05	5	
APEM	①	ø24.6, height 4					
Switches & Pilot Lights	2	② Extended ø24.6, height 9		ABN2BN-*	ABN2BN-*PN05	5	B (black), G (green), R (red), Y (yellow), S (blue), W (white)
Control Boxes	3	③ Mushroom ø40, height 16.2	Polyacetal	ABN3BN-*	ABN3BN-*PN02	2	
Emergency Stop Switches Enabling Switches	(4)	④ Jumbo Mushroom ø65, height 23.2		ABN4BN-*	ABN4BN-*	1	B (black), G (green), R (red), Y (yellow), S (blue)
Safety Products Explosion Proof	(5)	© Button for Pin Lock (ABD8P) ø23.6, height 3		ABW1B-*	ABW1B-*PN05	5	B (black), G (green), R (red), Y (yellow), S (blue), W (white)
Terminal Blocks Relays & Sockets Circuit	6	© ø40 Pushlock Turn Reset (AVN3, AVD3) ø40, height 18.5		AVN3B-*	AVN3B-*	1	R (red),Y (yellow)
Protectors Power Supplies LED Illumination	For TWN/TWND	© ø40 Push Turn Lock (AJN3, AJD3) ø40, height 18.5	AS resin	AJN3B-*	AJN3B-*	1	B (black), G (green), R (red), Y (yellow)
Controllers Operator Interfaces Sensors	Lens for Illuminated Pushbuttons ①	① Extended (ALN2, ALD2) ø24, height 18.5		ALN2LD-*-K	ALN2LD-*-KPN05	5	R (red), G (green), S (blue), Y (yellow), A (amber), W (white) Specify W for PW (pure white) illumination.
AUTO-ID	② For TWN/TWND	© ø40 Pushlock turn reset (AVLN3, AVLD3) ø40, height 18.5	AS resin	AVLN3L-R-K	AVLN3L-R-KPN02	2	R (red) only
Flush Silhouette ø16	Selector Operator	① Knob operator ø25, height 20.5		ASNHT-*	ASNHT-*PN02	_	
ø22 ø30	2	② Lever operator ø25, height 20.5, length 37.5	Polyacetal	ASNHL-*	ASNHL-*PN02	2	B (black), G (green), R (red)
Miniature Pilot Lights	3 4	③ Color insert Width 21, depth 5, height 18		TW-HC1*	TW-HC1*PN05	5	B (black), G (green), R (red), Y (yellow), S (blue), W (white)
TWN TWND	For TWN/TWND	4 Knob for illuminated selector switch (ASLN, ASLD) ø25, height 28	AS resin	ASLNHD-*-K	ASLNHD-*-K	1	G (green), R (red), S (blue), A (amber), W (white), Y (yellow) Specify W for PW (pure white) illumination.
ARN CS	Lens for Pilot Lights ①	① Round (APN1, APD1) ø24.6, height 28, M20 For TWN/TWND		APN106LN-*-K	APN106LN-*-KPN05	5	R (red), G (green), Y (yellow) A (amber), W (white), S (blue) Specify W for PW (pure white) illumination.
	2	② Rectangular (UPQN4) Width 36, depth 30, height 8.5	AS resin	UPQN406LD-*-K	UPQN406LD-*-KPN05	5	R (red), G (green), Y (yellow), A (amber), C (clear), S (blue) Specify C for PW (pure white) illumination.
	3	③ Square extended (UPQN3B) □25, height 26.5 For TWN		UPQN06LD-*-K	UPQN06LD-*-KPN05	5	R (red), G (green), S (blue), Y (yellow), A (amber), W (white) Specify W for PW (pure white) illumination.
	Marking Plate For TWN	Rectangular pilot lights (UPQN4) Width 29.8, depth 23.8, thickness 2	Acrylic	UPQN406N-W	UPQN406N-WPN05	5	W (white) only See B-346 for engraving area.

Maintenance Parts

						유
Shape	Material	Part No.	Ordering No.	Package Quantity	Remarks	ilot Lights
Rubber Washer (1.5 mm-thick)	Rubber (synthetic soft vinyl)	0W-11	OW-11PN10	10	• To tighten mounting panels	APEM
For TWN/TWND	ø39/ø29.5, height 1.5					Switches &
Rubber Washer (3.0 mm-thick)	Rubber					Pilot Lights Control Boxes
For TWN/TWND	(synthetic soft vinyl) ø39/ø29.5, height 3	0W-12	OW-12PN10	10	To tighten mounting panels	Emergency Stop Switches Enabling
Shroud for Pushbuttons						Switches
•	① Half shroud ø35/ø27, height 20.5	ABN2G	ABN2G	1	• With nut ring (ø35, height 4)	Safety Products Explosion Proof
©						Terminal Blocks
	② Full shroud ø35/ø28.5, height 16.5	ABN2F	ABN2F	1		Relays & Sockets
3	\$33/\$20.3, Height 10.3					Circuit Protectors
	③ Full shroud					Power Supplies
4	(for mushroom pushbuttons)	ABN3G	ABN3G	1		LED Illumination
	ø48, height 20					Controllers
(3)	Shallow shroud					Operator Interfaces
	(for jumbo mushroom) ø75, height 18	ABN4G	ABN4G	1		Sensors
	973, Height To					AUTO-ID
	© Deep shroud (for jumbo mushroom) ø75/ø69, height 33	ABN4F	ABN4F	1		Floris Cilliana No.
For TWN/TWND Shroud for Illuminated Pushbuttons						Flush Silhouette
①	① Half shroud (For BA9S base) ø35/ø27, height 25	ALN2GL	ALN2GL	1	• With nut ring (ø35, height 4)	ø16 ————————————————————————————————————
	your per , noight 20					ø30
For TWN/TWND	② Full shroud (For BA9S base) ø35/ø29.5, height 22.5	ALN2FL	ALN2FL	1	• With nut ring (ø35, height 4)	Miniature Pilot Lights
Spare Key	900/920.0, Holght 22.0					
For Key Selector Switches	Metal				AONEKEN	
	Nickel plated brass Length 3, width 19.7,	TW-SK-0	TW-SK-0PN02	2	ASN□K□N ASD□K□N	TWN
For TWN/TWND	thickness 1.8					TWND
Spare Key For Key Selector Switches	Motel					ARN
For TWN	Metal Nickel plated brass Length 37.5, thickness 2	ASN-SK-24401	ASN-SK-24401PN02	2	• ASN□K□-N024401	CS
Pin/Chain Kit For ABD8P	Pin: Nickel plated brass	ABD8P-PIN	ABD8P-PIN	1	• Pin, chain, and plate for ABN8P • Pin (ø4.6)	
Contact Block Plug						
Tel	Polyamide	HW9Z-CBPL	HW9Z-CBPLPN10	10	Used to plug the hole in the center of a contact block.	

For TWN/TWND

Circuit
Protectors

Power Supplies

LED Illumination

Controllers

Operator

Control Boxes

Emergency
Stop Switches
Enabling
Switches

Safety Products

Explosion Proof

Terminal Blocks

Maintenance Parts

All dimensions in mm

Shape	Description	Part No.	Ordering No.	Package Quantity	Remarks
Contact block	NO contact	HW-U10	HW-U10	- 1	Housing color: Blue
HW-U	NO contact	HW-U10-MAU	HW-U10-MAU	1	Push rod color: Green MAU has gold contacts
-	NC contact	HW-U01	HW-U01	1	Housing color: Reddish purple Push rod color: Red
	NC contact	HW-U01-MAU	HW-U01-MAU	1	MAU has gold contacts
	EM contact	HW-U10R	HW-U10R	- 1	Housing color: Blue Push rod color: Black
	(early make)	HW-U10R-MAU	HW-U10R-MAU	1	MAU has gold contacts
	LB contact	HW-U01R	HW-U01R		Housing color: Reddish purple
For TWN/TWND, 11g approx.	(late break)	HW-U01R-MAU	HW-U01R-MAU	1	Push rod color: White MAU has gold contacts
Dummy Block For TWN/TWND 3.5g approx.	Polyamide	HW-DB	HW-DBPN10	10	For HW-U contact blocks Used when the number of contact blocks and full voltage adapters is 1 or 3.
Full Voltage Adapter For Illuminated Switches (*1) For TWN/TWND 12g approx.	Polyamide	HW-GA1N	HW-GA1NPN02	2	Applicable model: Illuminated pushbuttons Illuminated selector switches Applicable load (LED lamp) LSRD-6, LSTD-6 (6V AC/DC) LSRD-1, LSTD-1 (12V AC/DC) LSRD-2, LSTD-2 (24V AC/DC)
Transformer Unit For Illuminated Switches (*1)	100/110V AC	HW-T16	HW-T16	1	Applicable model: Illuminated pushbuttons
For TWN/TWND 66g approx.	200/220V AC	HW-T26	HW-T26	1	Illuminated selector switches • Applicable load (LED lamp) LSRD-6, LSTD-6 (6V AC/DC)
Transformer Unit For Pilot Lights (*1)	100/110V AC	TWR-016B	TWR-016B	1	Mounting screws are not included. See B-347 for mounting screws.
For TWN/TWND 69g approx.	200/220V AC	TWR-026B	TWR-026B	1	Applicable load (LED lamp) LSRD-6, LSTD-6 (6V AC/DC)

^{*1)} For use as maintenance parts. Do not use for expansion or remodelling purposes.

LED Lamps (Use LED lamps for replacing incandescent lamps)

Model	Operating	Currei	nt Draw	Part No.	Ordering No.	Color Code	Package	Page
Model	Voltage	DC	DC	Part No.	Ordering No.	Color Code	Quantity	Base
LSRD	CV AC/DC	10m1	1.4mA	LSRD-6	LSRD-6		1	
	6V AC/DC	10mA	14mA	เอหม-ช	LSRD-6PN10		10	
2 10	12V AC/DC	7mA	8mA	LSRD-1	LSRD-1		1	BA9S
6	12V AC/DC	/ IIIA	OIIIA	LOND-1	LSRD-1PN10	_	10	/13
	24V AC/DC	7mA	8mA	LSRD-2	LSRD-2		1	
	24V AG/DG	/ IIIA	BIIIA	LSKD-2	LSRD-2PN10		10	
LSTD	6V AC/DC	7mA (R, A, W) 5.5mA (G, PW)	8mA (except S)	LSTD-6*	LSTD-6*	R, G, A, W, S,PW	1	
	OV AG/DG	4.5mA (S)	7mA (S)	L31D-0*	LSTD-6*PN10		10	BA9S - /13
	12V AC/DC	10mA (except S)	11mA (except S)	LSTD-1*	LSTD-1*		1	
	12V AC/DC	8mA (S)	9mA (S)		LSTD-1*PN10		10	
	24V AC/DC	10mA (except S)	11mA (except S)		LSTD-2*		1	
	24V AG/DG	8mA (S)	9mA (S)		LSTD-2*PN10		10	
LETD	6V AC/DC	14mA (R, A, W)	17mA (R, A, W)	LETD-6*	LETD-6*		1	
	OV AC/DC	5.5mA (G, S, PW)	8mA (G, S, PW)	LEID-0*	LETD-6*PN10		10	
111	12V AC/DC	6.5mA	7mA	LETD On	LETD-8*	R, G, A, W, S, PW	1	E12 /15
	12V AG/DG	(10mA: at 15V)	(11mA: at 15V)	LETD-8*	LETD-8*PN10		10	
	24V AC/DC	10mA	11mA	LETD-2*	LETD-2*		1	[
	24V AU/DU	TOTAL	TIMA	LEIU-Z*	LETD-2*PN10		10	

- ullet Only one color is available for LSRD so there are no codes to specify the color in the part no.
- Specify a color code in place of * in Part No. R (red), G (green), A (amber), W (white), S (blue), PW (pure white)
- Use a PW (pure white) LED for Y (yellow) illumination.
- When replacing the LED with LSRD, the lens must also be replaced (see B-341).

Flush Silhouette

Sensors AUTO-ID

ø16

ø22 ø30

Miniature

Pilot Lights

TWN
TWND

CS

Maintenance Parts

LED lamps for replacing incandescent lamps

Incandescent Lamp								
Model (mm) Part No. Operating Lamp Voltage Rating Base								
LS	LS-6	6V AC/DC	1W (6V)					
-31-0	LS-8	12V AC/DC	1W (18V)	BA9S				
Bulb: ø11	LS-2	18V AC/DC	1W (24V)	/13				
Length: 23	LS-3	24V AC/DC	1W (30V)					
LE	LE-6	6V AC/DC	2W (6V)					
	LE-8	12V AC/DC	2W (18V)	E12				
Bulb: ø13	LE-2	18V AC/DC	2W (24V)	/15				
Length: 34	LE-3	24V AC/DC	2W (30V)					

• Only one color is available for LSRD so there are no codes to specify the color in the part no.

Operating Voltage

100/110V AC

200/220V AC

400/4440V AC

100/110V AC

200/220V AC

400/4440V AC

• Terminal cover (TWR-VL3) is installed on transformers as standard.

Voltage Range

±10%

±10%

±10%

±10%

±10%

±10%

• When replacing incandescent lamps to LSRD, the lens must also be replaced (see B-341).

	ı	Replacement	LED Lamp		
	Part No.	Color Code	Operating Voltage	Base	
	LSRD-6		6V AC/DC		
	LSRD-1		12V AC/DC	BA9S	
	LSRD-2	_	24V AC/DC	/13	
	LSRD-2		24V AC/DC		
	LETD-6*		6V AC/DC		
	LETD-8*	R, G, A,	12V AC/DC	E12	
	LETD-2*	S, PW	24V AC/DC	/15	
	LETD-2*		24V AC/DC		

Part No.

(Ordering No.)

TWR516

TWR526

TWR546

TWR512

TWR522

TWR542

- When using a commercially available incandescent lamp, choose a lamp with the same dimensions, operating voltage, and base.
- Specify a color code in place of * in Part No. R (red), G (green), A (amber), S (blue), PW (pure white)
- Use a PW (pure white) LED lamp for Y (vellow) illumination.
- For O (orange) and C (clear) color code of incandescent lamp, use A (amber) LED lamp.

Applicable Load

APEM

Control Boxes

Emergency Stop Switches Enabling Switches

Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets Circuit Protectors

Power Supplies

LED Illumination

Controllers Operator

Interfaces

Sensors

AUTO-ID

ø16

ø22

Flush Silhouette

LSRD-2, LSTD-2* (24V AC/DC, LED lamp)

Specify a color code in place of * in Part No.

LSRD-6, LSTD-6* (6V AC/DC, LED lamp)

R (red), G (green), A (amber), S (blue),

R (red), G (green), A (amber), S (blue),

Specify a color code in place of * in Part No.

Specifications

For 6V

For 24V

Transformer

Shape

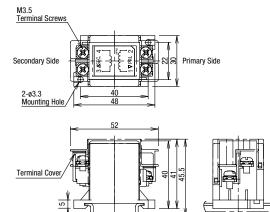
Part No.	TWR5□6	TWR5□2	
Rated Voltage	100/110V AC, 200/220V AC,	400/440V AC (50/60 Hz)	
Current Draw	2.4VA		
Rated Insulation Voltage	600V		
Insulation Resistance	100MΩ minimum (500V DC	megger)	
Operating Temperature –30 to 60°C (no freezing)			
Operating Humidity	35 to 85% RH (no condensation)		
Storage Temperature	ge Temperature -40 to +80°C (no freezing)		
Vibration Resistance	Damage limits: 30 Hz, amplitude 1.5 mm		
Vibration Resistance	Operating extremes: 5 to 55 Hz, amplitude 0.5 mm		
Shock Resistance	1000 m/s ²		
Shock Resistance	100 m/s ²		
Dielectric Strength	2500V AC, 1 minute		
Terminal Screw M3.5			
Applicable Wire 2 mm² maximum, 2 wires maximum		aximum	
Weight 87g			

Dimensions

PW (pure white)

PW (pure white)

All dimensions in mm.



Miniature

Pilot Lights

ARN

CS

Accessories

Shape	Material	Part No.	Ordering No.	Package Quantity	Dimensions (mm)
DIN 35 mm Rail Weight: 200g approx.	Aluminum Length: 1000 mm	BAA1000	BAA1000PN10	10	12.5 1.7 12.5 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7
End Clip Weight: 15g approx.	Metal (zinc-plated steel) Applicable rail: BAA1000 BAP1000	BNL6	BNL6PN10	10	M4 screw

• See H-071 for DIN rail products.



Safety Precautions

- Turn off the power to the TWN/TWND switches & pilot lights before starting installation, removal, wiring, maintenance, and starting installation, removing, wiring, maintenance, and inspection of the products. Failure to turn power off may cause electrical shocks or fire hazard.
- For wiring, use wires of a proper size to meet the voltage and current requirements. Tighten the terminal screws to the recommended tightening torque (see B-349). Failure to tighten terminal screws may cause overheat and
- When using a commercially available lamp, choose a lamp with rated voltage 5 to 30V AC/DC and 1W maximum, and with the same base and shape. Make sure of correct operation before installation. The operation of illuminated pushbutton switches cannot be guaranteed when a commercially available

APEM

Control Boxes Emergency

Stop Switches Enabling

Safety Products

Switches

Explosion Proof

Terminal Blocks Relays & Sockets

Circuit Protectors

Power Supplies

LED Illumination

Controllers

Operator Interfaces

Sensors

AUTO-ID

Flush Silhouette

ø16

ø22

Miniature

Pilot Lights

ARN

CS

- To avoid a burn on your hand, use the lamp holder tool when replacing lamps.
- lamp is used.

Operating Instructions

Panel Mounting

- 1. Remove the locking ring from the operator and check that the rubber gasket is in place. For mushroom and jumbo mushroom switches, remove the button before removing the locking ring.
- 2. Adjust the thickness of the rubber washers according to the panel thickness.
- 3. Insert the switch into the panel from the back of the panel.
- 4. On the panel front, install the nameplate and locking ring. For mushroom and jumbo mushroom switches, install the button before installing the locking ring.

Rubber Gasket Locking Ring Nameplate

Panel Thickness and Rubber Washer

Adjust the thickness of the rubber washers according to the panel thickness as shown in the tables below. Also, make sure to include the nameplate thickness when using a nameplate.



Illuminated pushbutton (extended w/full shroud)

Rubber Washer

1.5 mm-thick 3.0 mm-thick

1

Applicable Model

TWN/TWND series

(flush/extended/mushroom/jumbo mushroom) Illuminated pushbutton (extended/mushroom) Pilot light (except for square type)

Panel	Rubber Washer		
Thickness (mm)	1.5 mm-thick	3.0 mm-thick	
Supplied	2 pieces	1	
0.8 to 3.5	2 pieces	1	
3.5 to 5.0	1	1	
5.0 to 6.5	_	1	
6.5 to 7.5	1	-	

Rubber Washer

1.5 mm-thick 3.0 mm-thick

5.0 to 6.0 (6.5)* *1: (6.5) is for mushroom pushbuttons with full shroud

2 pieces

2 pieces

TWND series Pushbutton (extended with half shroud)

Pin lock pushbutton

TWN/TWND series

Thickness (mm)

Supplied

0.8 to 3.5

2.0 to 3.5

3.5 to 5.0

Mushroom with full shroud

Panel	Rubber Washer		
Thickness (mm)	1.5 mm-thick	3.0 mm-thic	
Supplied	2 pieces	1	
0.8 to 3.0	2 pieces	1	
3.0 to 4.5	1	1	
4.5 to 6.0	-	1	
6.0 to 7.5	1	_	

TWN/TWND series

TWN/TWND series

Illuminated pushbutton

Panel

Thickness (mm)

Supplied 0.8 to 1.8 1.8 to 3.5

(extended with half shroud)

Pushbutton (extended with full shroud)

		,	
Panel	Rubber Washer		
Thickness (mm)	1.5 mm-thick	3.0 mm-thick	
Supplied	2 pieces	1	
0.8 to 2.5	2 pieces	1	
2.5 to 4.0	1	1	
4.0 to 5.5	_	1	
5.5 to 6.0	1	_	

TWN/TWND series

Other models (excluding square)

Panel	Rubber Washer		
Thickness (mm)	1.5 mm-thick	3.0 mm-thick	
Supplied	2 pieces	1	
0.8 to 3.5	2 pieces	1	
3.5 to 5.0	1	1	
5.0 to 6.5	_	1	
6.5 to 7.5	1	_	

• See B-324 for square pilot lights about installing on the panel and replacing LED lamps.

Notes for Panel Mounting

Locking ring wrench recommended torque

Tighten the bezel to a tightening torque of 3.0 to 3.5 N·m.

Locking ring wrench

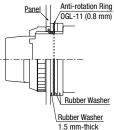
Locking ring wrench (OR-12) can be used to tighten the bezel. Use side B to tighten. Side B: For TWN/TWND series Side A: TWS series



Installing the Anti-rotation Ring (OGL-11)

Anti-rotation rings are used on selector switches or pushbuttons which rotate and used when using no nameplates. Insert a 1.5 mm-thick rubber washer between the panel and the anti-rotation ring as shown on the right.

To install, adjust the panel thickness by taking the thickness of anti-rotation ring (OGL-11) into consideration.



Replacement of LED Lamps

Lamps can be replaced by using the lamp holder tool (OR-55) from the front of the panel. (See B-338 for lamp holder tool.)

How to Remove

To remove, slip the lamp holder tool onto the lamp head lightly. Then push slightly, and turn the lamp holder tool counterclockwise.



How to Install

To install, insert the lamp head into the lamp holder tool. Place the two pins on the lamp base to the grooves in the lamp socket. Inset the lamp and turn it clockwise.



The number of rubber washers shown in the dimensions of TWN/TWND series may differ from the number of rubber washers supplied.

Control Boxes

Stop Switches

Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

LED Illumination

Controllers

Operator

Interfaces

Sensors

AUTO-ID

Flush Silhouette

ø16

ø22

Miniature

Pilot Lights

Circuit

Protectors **Power Supplies**

Emergency

Enabling

Switches

Operating Instructions

Installing/Removing the Buttons and Lenses

To install

Pushbutton button

Flush/Extended

Push in the button to install.



Insert a flat screwdriver between the button and the bezel to remove the button (see below for details).

To remove



-Notches

Notches on the operating shaft

The operating shaft has four notches as shown at right. Insert a flat screwdriver (3 mm max.) into one of the notches, and tilt the screwdriver to remove the button.



Make sure to insert a flat screwdriver into one of the notches, otherwise the pushbutton may be damaged.

Notes on button removal

To avoid damaging the bezel or the button, remove the bezel from the pushbutton before inserting a flat screwdriver.

Mushroom/ **Jumbo Mushroom**

Button has threads. Turn clockwise to install the button.



Turn the button counterclockwise to remove.



Illuminated Pushbutton Lens

Extended/Mushroom

Lens has threads. Turn clockwise to install the lens.



Turn the lens counterclockwise to remove.



Pilot Light Lens Round

Lens has threads. Turn clockwise to install the lens.



Turn the lens counterclockwise to remove.



A rubber gasket is installed between the lens and operator on pilot lights. Make sure that the rubber gasket is in place when installing the lens.

Marking Plate on Pilot Lights

Rectangular Marking Plates (for UPQN4)

Removina

① Insert a flat screwdriver between the lens and bezel, and tilt the screwdriver to remove the lens.



Engraving Area

Material: Acrylic resin Size:

29.8 W × 23.8 D, thickness 2.0 mm Engraving area:

 $28 \text{ W} \times 22 \text{ D} \times 1.0 \text{ mm}$ height max.

② A white marking plate is installed in the lens which can be removed easily.

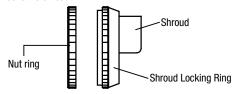


Engraving Area 28 29.8

Installing the Half Shroud on Extended Pushbuttons/ **Illuminated Pushbuttons**

Half Shroud Parts

A shroud is installed in the shroud locking ring. Tightening the shroud locking ring in the switch locks the shroud.

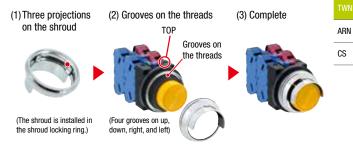


Installing the Half Shroud

- ① Adjust the thickness of the rubber washers according to the panel thickness (see B-345).
- ② Insert the switch into the panel from the back of the panel.
- 3 Install the nut ring from the panel front to tighten the switch.
- (4) Install the half shroud on the upper side of the switch, and tighten the shroud
- (5) Make sure that the shroud is securely fastened inside the shroud locking ring.

Tightening the Half Shroud

Align the three projections on the shroud with the groove on the switch, and tighten the shroud on the upper side of the switch. Tighten the shroud locking



- Shrouds may rattle depending on the panel thickness.
- · A gap may appear between the nut ring and the shroud locking ring depending on the panel thickness.



Operating Instructions

Selector Switches

Turn the operator such as knob, lever, and key to each position accurately. Releasing halfway may cause the operator to return to the former position, or to get stuck between. On spring return two-way types, the center of operators may be misaligned slightly.

APEM

Control Boxes Emergency Stop Switches

Enabling Switches Safety Products

Explosion Proof

Terminal Blocks Relays & Sockets

Circuit Protectors

Power Supplies

LED Illumination Controllers

> Operator Interfaces

Sensors

AUTO-ID

Key Selector Switches

Insert the key completely before turning. Failure to do so may cause failures.

Installing the Operator on Selector Switches

① Install the switch with TOP marking facing upward, so that the operator can be installed on the switch in the correct direction.



2 On non-illuminated models, install the color insert in the middle of operator. The color insert also serves to retain the operator.



3 On illuminated models, align the operator with the switch by confirming the TOP marking on the switch and also the switch operation. Then press in the operator into the switch.



Flush Silhouette

ø16 ø22

Miniature

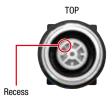
Pilot Lights

ARN

CS

Installation of Selector Operators

The shaft of each non-illuminated selector switch has a recess to identify in which direction to install the operator. Align the operator with the recess and press in the operator. Press a color insert (non-illuminated) into the operator (illuminated selector switches do not have a recess on the shaft).





90° 2-position



45° 3-position

The non-illuminated operators can be installed in positions other than the standard position shown above







Standard positions

Removal

Removing the Operator from Selector Switches



(1) Insert a flat screwdriver into the recess under the color insert. Turn the screwdriver to push out the insert from the operator.



2 Pull out the operator sideways as shown in the left photo to remove the

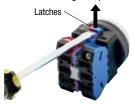
Removing the Operator from Illuminated Selector Switches



- ① Insert a flat screwdriver (4 to 5 mm) into the recess at right or left under the operator and tilt. The operator is displaced slightly.
- 2 Insert the flat screwdriver into the other recess and tilt. The operator can be removed.

Removing the Contact Blocks/Full Voltage Adapters

Insert a flat screwdriver (4 to 6 mm) into the snap-fit latches of the contact block or full voltage adapter and lift to remove.



- Make sure to lift both latches. Contact blocks cannot be removed by lifting one latch only.
- . Do not apply excessive force to the latches, otherwise damage maybe

Transformer Units and DC-DC Converters

Insert the end of the contact block removal tool (TW-KC1) into the snap-fit latch of the transformer units or DC-DC converter and pull the tool forward. The contact block removable tool cannot be used to remove the HW-U contact blocks or full voltage adapters.



🗥 When replacing parts (contact block, dummy block, full voltage adapter, transformer) for maintenance, make sure to install the parts to the original position. Otherwise proper operation cannot be guaranteed

Transformer Units and DC-DC Converters for Pilot Lights Unfasten the two mounting screws on the back to remove the transformer unit/

DC-DC converter.



Mounting screws

APN: M3 × 6 (screw diameter ø5.5 or below) APD: M3.5 × 6 (screw diameter ø5.5 or below)

Operating Instructions

Applicable Wiring

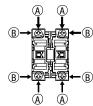
(1) Contact Block 0.3 to 3.5 mm² (solid wire 0.5 to 2.0 mm)

Pushbutton/illuminated pushbutton/selector switch/ illuminated selector switch/selector pushbutton

A and B show the wiring direction to the terminals.

<Contact Block>

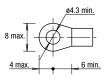
Terminal screws M3.5 (spring-up)

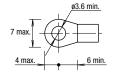


Applicable Crimping Terminal

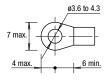
Be sure to use an insulation tube or cover on the crimping part of the crimping terminal to prevent electrical shocks.

Crimping terminal for (A)



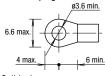


IP20 crimping terminal

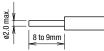


Crimping terminal for (B)

IP20 crimping terminal



Solid wire



- Strip the wire insulation 8 to 9 mm from the end.
- Insert the wire until the insulation comes into contact with the terminal metal part.

(1)-1 IP20 Degree of Protection

The terminal of HW-U contact block has IP20 degree of protection. When IP20 is required for wiring, observe the followings.

Make sure to insert the crimping terminal or wire to the terminal straight and fully.

When using a crimping terminal

Use IP20 crimping terminals.

When using a solid wire

Strip the wire insulation 8 to 9 mm from the end and insert the wire to the terminal fully.

When using a stranded wire

Strip the wire insulation 8 to 9 mm from the end and insert the wire to the terminal fully. Make sure that the wires are not loosened.

(2) Power Unit

0.3 to 2 mm² (solid wire 0.5 to 1.6 mm)

Illuminated pushbutton/illuminated selector switch

A and B show the wiring direction to the terminals.

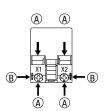
<Full Voltage Adapter>

Terminal screws M3.5 (spring-up)



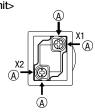
<Transformer Unit>

100/110V AC, 200/220V (240V AC or below) Terminal screws M3.5 (spring-up)



<DC-DC Conver Unit/Transformer Unit>

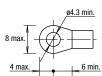
110V DC. 380V Terminal screws M3.5 (spring-up)

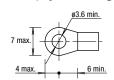


Applicable Crimping Terminal

Be sure to use an insulation tube or cover on the crimping part of the crimping terminal to prevent electrical shocks.

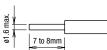
Crimping terminal for (A)





Crimping terminal for (B)

Solid wire



- Strip the wire insulation 7 to 8 mm from the end.
- Insert the wire until the insulation comes into contact with the terminal metal part.
- . Terminal cover is integrated in the full voltage adapter and transformer unit. Note that the connection terminal is not IP20.

APEM

Control Boxes

Emergency Stop Switches Enabling Switches

Safety Products

Explosion Proof

Terminal Blocks Relays & Sockets

Circuit Protectors

Power Supplies

LED Illumination

Controllers

Operator

Interfaces

Sensors

AUTO-ID

Flush Silhouette

ø16

ø22

Miniature

Pilot Lights

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CS

Control Boxes

Emergency Stop Switches Enabling

Switches

Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

Circuit

Protectors

Power Supplies

LED Illumination

Operator Interfaces

Sensors

AUTO-ID

Flush Silhouette

ø16 ø22

ø30 TWN/TWND Series

Operating Instructions

(3) Pilot Light 0.3 to 2 mm² (solid wire 0.5 to 1.6 mm)

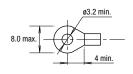
Applicable crimping terminal

Be sure to use an insulation tube or cover on the crimping part of the crimping terminal to prevent electrical shocks.

APN1, UPQN3B, UPQN4 (6, 12, 24V AC/DC)

Terminal screws M3 (self-lifting)

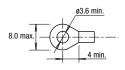
(Arrows show the wiring direction)





APD1 (6, 12V, 24V AC/DC)

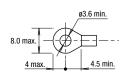
Terminal screws M3.5 (self-lifting)





APN1, UPQN3B, UPQN4, APD1 (100 to 480V AC or below, 110V DC)

Terminal screws M3.5 (self-lifting)





- Install the terminal cover supplied with the pilot light. The connection terminal is not IP20.
- When selecting mounting centers and crimping terminals, take sufficient insulation distance into consideration.

Cautions for Wiring

About using DC-DC Converter Unit

1. Note the polarity for wiring when connecting to the DC-DC converter.

Terminal No.	Polarity
X1	Positive
X2	Negative

- 2. Incandescent lamps cannot be used in DC-DC converter unit.
- DC-DC converters are equipped with an electric circuit and noise may be heard inside the unit, which does not affect the performance of DC-DC converters

Recommended Tightening Torque Number of Wires

Unit	Wire		Number of Wires	Recommended Tightening Torque (Nm)	Terminal Screw
	Crimp	oing Terminal	2	1.0 to 1.3	
	Solid	Ø0.5 to 1.6 mm (AWG14 to 22)	2	1.0 to 1.3	
HW-U Contact	Wire	ø1.7 to 2.0 mm (AWG12)	1	1.2 to 1.3	M3.5
Block Stranded	0.3 to 2.0 mm ² (AWG14 to 22)	2	1.0 to 1.3		
Wire		2.1 to 3.5 mm ² (AWG12)	1	1.2 to 1.3	
	Crimping Terminal				
Illuminated Wire (AWG141		ø0.5 to 1.6 mm (AWG14 to 22)	2	1.0 to 1.3	M3.5
Unit (*1) Stranded Wire	0.3 to 2.0 mm ² (AWG14 to 22)				
	Crimping Terminal				
Pilot Light	Solid Ø0.5 to 1.6 mm Wire (AWG14 to 22)		2	0.6 to 1.0 (M3.0)	
	Stranded Wire	0.3 to 2.0 mm ² (AWG14 to 22)		1.0 to 1.3 (M3.5)

^{*1)} Lamp terminal of illuminated pushbuttons and illuminated selector switches

TWN

Miniature Pilot Lights

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Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator

Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature Pilot Lights

ARN CS

ø30 Selector Switches / Pushbuttons Part Number Replacement List

Old Series Model Operator Old Part No. New Part No. (*3) Re	
	marks
ASN310 ASN210N	
ASN311 ASN211N ASN320 ASN220N	
ASN322 ASN222N	
ASN37S ASN22RN-118	
ASN410 ASN2110N	
ASN411 ASN2111N	
ASN420 ASN2120N	
ASN422 ASN2122N	
90° ASN47S ASN212RN-118	(40)
2-position ASN3010 ASN201N ASN3011 ASN211N	(*2)
ASN3020 ASN202N	(*1) (*2)
ASN3020 ASN202N ASN3022 ASN222N	(2) (*1)
ASN307S ASN22RN-118	(*1)
ASN4010 ASN2210N	`'/
ASN4011 ASN2211N	
ASN4020 ASN2220N	
ASN ASN4022 ASN2222N	
Knoh ASN407S ASN222RN-168	
Operator ASN111 ASN320N	(*2)
ASN122 ASN340N	(*2)
ASN15S ASN322N ASN17S ASN302N	(*1)
ASN17S ASN302N ASN18S ASN304N	(*1) (*1)
ASN211 ASN3220N	(*2)
ASN222 ASN3240N	(*2)
ASN25S ASN3222N	
ASN27S ASN3202N	(*1)
45° ASN28S ASN3204N	(*1)
	1) (*2)
	1) (*2)
ASN105S ASN322N ASN107S ASN302N	(*1)
ASN1073 ASN302N ASN108S ASN304N	
	1) (*2)
	1) (*2)
ASN205S ASN3122N	(*1)
ASN207S ASN3102N	
ASN208S ASN3104N	
ASN3L10 ASN2L10N	
ASN3L11 ASN2L11N ASN3L20 ASN2L20N	
ASN3L20 ASN2L20N ASN3L22 ASN2L22N	
ASN3LZZ ASNZLZZN ASN3L7S ASN2L2RN-118	
ASN4L10 ASN21L10N	
ASN4L11 ASN21L11N	
ASN4L20 ASN21L20N	
ASN4L22 ASN21L22N	
90° ASN4L7S ASN21L2RN-118	
2-position ASN30L10 ASN2L01N	(*2)
ASN30L11 ASN2L11N	(*1) (*2)
ASN-L ASN30L20 ASN2L02N ASN30L22 ASN30L22N	(*2) (*1)
ASN30L22	(^1) (*1)
Operator ASN30L73 ASN2LZRN-110	\ ' <i>!</i>
ASN40L11 ASN22L11N	
ASN40L20 ASN22L20N	
ASN40L22 ASN22L22N	
ASN40L7S ASN22L2RN-168	
ASN1L11 ASN3L20N	(*2)
ASN1L22 ASN3L40N	(*2)
ASN1L5S ASN3L22N ASN1L7S ASN3L02N	(*1)
3-position ASN1L8S ASN3L04N	(*1)
ASN2L11 ASN32L20N	(*2)
	(*2)
ASN2L22 ASN32L40N	<u> </u>

	Old Series	3	N B (2)	ь .
Model	Operator	Old Part No.	New Part No. (*3)	Remarks
		ASN2L7S	ASN32L02N	(*1)
		ASN2L8S	ASN32L04N ASN3L20N	(*1)
		ASN10L11 ASN10L22	ASN3L40N	(*1) (*2) (*1) (*2)
		ASN10L22 ASN10L5S	ASN3L22N	(*1) (2)
ASN-L	45°	ASN10L7S	ASN3L02N	(')
Lever	3-position	ASN10L8S	ASN3L04N	
Operator		ASN20L11	ASN31L20N	(*1) (*2)
		ASN20L22	ASN31L40N	(*1) (*2)
		ASN20L5S	ASN31L22N	(*1)
		ASN20L7S	ASN31L02N	
		ASN20L8S	ASN31L04N	
		ASN3K10□	ASN2K10N□-N024401	
		ASN3K11□	ASN2K11N□-N024401	
		ASN3K20□ ASN3K22□	ASN2K20N□-N024401 ASN2K22N□-N024401	
		ASN3K7S	ASN2K2RN□-118-N024401	
		ASN4K10	ASN21K10N-N024401	
		ASN4K11	ASN21K11N-N024401	
		ASN4K20	ASN21K20N-N024401	
		ASN4K22	ASN21K22N-N024401	
	90°	ASN4K7S	ASN21K2RN-118-N024401	
	2-position	ASN30K10□	ASN2K01N□-N024401	(*2)
		ASN30K11	ASN2K11N - N024401	(*1)
		ASN30K20□ ASN30K22□	ASN2K02N□-N024401	(*2)
		ASN30K7S	ASN2K22N□-N024401 ASN2K2RN□-118-N024401	(*1) (*1)
		ASN40K10	ASN22K10N-N024401	(1)
		ASN40K10	ASN22K11N-N024401	
		ASN40K20	ASN22K20N-N024401	
		ASN40K22	ASN22K22N-N024401	
ASN-K Key		ASN40K7S	ASN22K2RN-168-N024401	
Selector		ASN1K11□	ASN3K20N□-N024401	(*2)
00.00.0		ASN1K22□	ASN3K40N□-N024401	(*2)
		ASN1K5S	ASN3K22N□-N024401	(*1) (*2)
		ASN1K7S□ ASN1K8S□	ASN3K02N□-N024401 ASN3K04N□-N024401	(*1) (*2) (*1) (*2)
		ASN2K11□	ASN32K20N□-N024401	(*2)
		ASN2K22□	ASN32K40N□-N024401	(*2)
		ASN2K5S□	ASN32K22N□-N024401	(*1) (*2)
		ASN2K7S□	ASN32K02N□-N024401	(*1) (*2)
	45°	ASN2K8S□	ASN32K04N□-N024401	(*1) (*2)
	3-position	ASN10K11□	ASN3K20N□-N024401	(*1) (*2)
		ASN10K22	ASN3K40N□-N024401	(*1) (*2)
		ASN10K5S□ ASN10K7S□	ASN3K22N□-N024401 ASN3K02N□-N024401	(*1) (*2) (*2)
		ASN10K7S	ASN3K02N - N024401 ASN3K04N - N024401	(*2)
		ASN20K11□	ASN31K20N□-N024401	(*1) (*2)
		ASN20K22□	ASN31K40N□-N024401	(*1) (*2)
		ASN20K5S□	ASN31K22N□-N024401	(*1) (*2)
		ASN20K7S□	ASN31K02N□-N024401	(*2)
		ASN20K8S□	ASN31K04N□-N024401	(*2)
	000	ASTN3211	ASN211N	/*41
2	90° 2-position	ASTN3222 ASTN4211	ASN222N ASN2111N	(*1)
	L position	ASTN4211 ASTN4222	ASN2111N ASN2122N	(*1)
		ASTN1122	ASN322N	''
		ASTN1222	ASN322N-311	
		ASTN1340	ASN340N	
ASTN		ASTN1422	ASN322N-209	
Knob Operator		ASTN1520	ASN320N	
Operator	45°	ASTN1540	ASN340N	(*1)
	3-position	ASTN1611	ASN311N-303 ASN322N-310	
			Manuazzin=510	1
		ASTN1622 ASTN2122		
		ASTN2122	ASN3222N	

[•] \square : Key removable position code. Specify the same code as the old series.

^{*1)} The location of contacts is different. In application for maintenance purpose, make sure of contact operation before wiring.

^{*2)} Contact operation is same as the old series, but contact type is different.

^{*3)} The knob operator is diecast zinc and has new shape. The knob operator can be installed at 45 degrees intervals.

ø30 Selector Switches / Pushbuttons Part Number Replacement List

Model Operator	Old Series					
ASTN Knob Operator ASTN Knob Operator ASTN Stribus AS	Ξ	Model	1		New Part No. (*3)	Remarks
ASTN (Rob Operator Knob Operator Knob Operator Knob Operator Synostition (ASTN5120 ASN3320N ASTN5120 ASN3320N ASTN5120 ASN3320N ASTN5120 ASN3320N ASTN5121 ASN3321N-202 ASTN5222 ASN3322N-311 ASN2111N ASN3311N-202 ASTN3211 ASN2111N ASN3311N-202 ASTN3211 ASN2111N ASTN42122 ASN3122N (*1) ASTN4211 ASN2111N ASTN42122 ASN3122N (*1) ASTN4211 ASN2111N ASTN42122 ASN3122N (*1) ASTN4211 ASN2111N ASTN42120 ASN3122N (*1) ASTN4211 ASN2111N ASTN4211 ASN2111N ASTN42120 ASN3122N (*1) ASTN4211 ASN2111N ASTN42120 ASN3122N ASTN1122 ASN3122N ASTN1122 ASN3122N ASTN1122 ASN3122N ASTN1122 ASN3122N ASTN1122 ASN3122N-209 ASTN1120 ASN3140N (*1) ASTN1111 ASN3111N-303 ASTN1111 ASN	igh	Model	Operator		ACMOTOON OOO	
APEM (Nob Operator Knob Operator Knob Operator Knob Operator Structures & Pitor Lights Control Boxes Emergency Stop Switches & Pitor Lights Emergency Stop Switches Enabling Switches Safety Products Explosion Proof Explosion Proof Circuit Protectors Circuit Protectors Circuit Protectors Power Supplies LED Illumination Controllers ASTNICIAC ASN3120N (*1) ASTNICIAC ASN3120N	रि					(*1)
APEM APEM APEM ASTN5120		ACTN				
APEM Switches Prot Lights						(1)
Strictures 8	40514		3-position			
ASTN3111	APEIVI	oporato.				
Control Boxes Emergency Stop Switches Enabling Switches Safety Products Explosion Proof Terminal Blocks Circuit Protectors Power Supplies LED Illumination Controllers Operator Operator Operator Operator Operator Flush Silhouette ### ASTN ■ K Key Selector ### ASN ■ T ### ASN ■						
Emergency Stop Switches Emergency Stop Switches Safety Products Embiling Switches Safety Products Explosion Proof	Pilot Lights			i e		
Emergency Stop Switches Enabling Switches Safety Products Explosion Proof Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces Sensors AUTO-ID Flush Silhouette ### ASTN ■ K Key Selector ### ASTN ■ K ASTN ■	Control Boxes		90°			(*1)
ASTN#2L22	Emorgonou					
Enabling Switches Safety Products					ASN21L22N	(*1)
Switches Safety Products				ASTN11L22		
Explosion Proof Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces Sensors AUT0-ID Flush Silhouette Pilot Lights Flush Silhouette Pilot Lights ASTN■L ASTNUBL22 ASN31L22N-310 ASTN2L222 ASN31L22N-311 ASTN20L22 ASN31L22N-311 ASTN20L22 ASN31L22N-311 ASTN20L22 ASN31L22N-209 ASTN20SL20 ASTN31L22N-209 ASTN31L22N-209 ASTN31L22 ASN33L22N-311 ASTN51L10 ASTN51L10 ASTN51L20 ASN31L20N (*1) ASTN51L21 ASN31L2N-209 ASTN51L22 ASN31L2N-209 ASTN31L22N-311 ASTN51L11 ASN33L1N-202 ASTN32K21 ASN33L22N-311 ASTN32K21 ASN33L22N (*1) ASTN42K21 ASN3K2N1 ASN2K2N (*1) ASTN42K21 ASN3K2N (*1) ASTN42K21 ASN3K2N (*1) ASTN1K2C1 ASN3K2N (*1) ASTN1K2C1 ASN3K2N (*1) ASTN1K2C1 ASN3K2N (*1) ASTN1K2C1 ASN3K2N (*1) ASTN1K2C2 ASN3K2N (*1) ASTN1K2C1 ASN3K2N (*1) ASTN1K2C2 ASN3IK2N (*1) ASTN2OK2C2 AS				ASTN12L22	ASN3L22N-311	
Explosion Proof	Safety Products			ASTN13L40	ASN3L40N	
Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces AUTO-ID Flush Silhouette ### Pilot Lights ASTN■K Key Selector ### Selector ASTN ■ K Key Selector ASTN ■ K ASTN	- Culoty 1 Todaoto			ASTN14L22	ASN3L22N-209	
ASTNI■L Lever Operator Circuit Protectors	Explosion Proof			ASTN15L20	ASN3L20N	(*1)
Circuit Circuit ASTN16L22				ASTN15L40	ASN3L40N	(*1)
Circuit Protectors	Terminal Blocks	ASTN■L		ASTN16L11	ASN3L11N-303	
Circuit Protectors		Lever		ASTN16L22	ASN3L22N-310	
ASTN21222 ASN31222N-311	Relays & Sockets	Operator	45°	ASTN21L22		
Protectors						
ASTN204L22	Protectors		o position			
ASTN204L22	Power Supplies					
ASTN205L40						
ASTN51L20	LED Illumination					
ASTN51L22						(*1)
ASTN52L22	Controllers					
ASTN51L11	Operator					
AUTO-ID	Interfaces					
AUTO-ID ASTN32K12□ ASN2K2N□ (*1) ASTN42K21 ASN2K2N□ (*1) ASTN42K22 ASN21K22N (*1) ASTN11K22□ ASN3K22N□ ASTN12K22□ ASN3K22N□ ASTN12K22□ ASN3K22N□ ASTN11K22□ ASN3K2N□ ASTN11K22□ ASN3K2N□ ASTN11K22□ ASN3K2N□ ASTN15K20□ ASN3K2N□ ASTN15K20□ ASN3K2N□ ASTN15K20□ ASN3K2N□ ASTN16K21□ ASN3K4NN□ (*1) ASTN16K21□ ASN3K4NN□ (*1) ASTN16K21□ ASN3K4NN□ ASTN16K22□ ASN3K2N□ ASTN21K22□ ASN3K2N□ ASTN202K22□ ASN31K22N□ ASTN202K22□ ASN31K22N□ ASTN204K22□ ASN31K22N□ ASTN204K22□ ASN31K22N□ ASTN205K20□ ASN31K2N□ ASTN205K20□	Sensors			i e		
AUTO-ID AUTO-ID			000			/*·1\
ASTN42K22 ASN21K22N (*1)	AUTO-ID				("1)	
Flush Silhouette			2-position			(*1)
Flush Silhouette ### 616 ### 622 ### 85TN1■K Key Selector ### Pilot Lights ### 75						(1)
ASTN13K40						
## ASTN ■ K Key Selector ## ASTN ■ ASTN						
## ASTN ■ K Key Selector ## ASTN ■ ASTN ■ K Key Selector ## ASTN ■	Flush Silhouette	ush Silhouette	-			
## ASTN ■ K Key Selector ## ASTN ■ Key Selector #	a16					(*1)
## ASTNI■K Key Selector ## ASTN16K11□ ASN3K11N□-303 ## ASTN16K22□ ASN3K22N□-310 ## ASTN21K22□ ASN32K22N□-311 ## ASTN201K22□ ASN31K22N□-311 ## ASTN201K22□ ASN31K22N□-311 ## ASTN204K22□ ASN31K22N□-311 ## ASTN204K22□ ASN31K22N□-311 ## ASTN205K20□ ASN31K22N□-209 ## ASTN205K20□ ASN31K2N□-209 ## ASTN205K20□ ASN31K2N□-209 ## ASTN51K20 ASN31K2N□-209 ## ASTN51K20 ASN33K2N□ ASTN51K20 ASN33K2N□ ASTN51K22 ASN33K2N□ ASTN51K22 ASN33K2N□ ASTN51K22 ASN33K2N□ ASTN51K22 ASN33K2N□ ASTN51K11 ASTN51K11 ASN33K11N-202 ## ASN-T Knob Operator Company Compa						
Key Selector	ø22	ΔSTN■K				(' ' /
Selector 45° 3-position 45° ASTN21K22□ ASN32K22N□ ASTN22K22□ ASN32K22N□ ASTN201K22□ ASN31K22N□ ASTN201K22□ ASN31K22N□ ASTN202K22□ ASN31K22N□ ASTN204K22□ ASN31K22N□ ASTN204K22□ ASN31K22N□ ASTN205K20□ ASN31K20N□ (*1) ASTN205K40□ ASN31K40N□ (*1) ASTN51K20 ASN33K20N ASTN51K22 ASN33K22N ASTN51K22 ASN33K22N ASTN51K22 ASN33K22N ASTN51K11 ASTN31K1N□ ASTN51K11 ASN33K11N□ ASTN51K11 ASN33K11N□ ASN140□ ASN140□ ASN140□ ASN140□ ASN140□ ASN320N ASN140□ ASN320N ASN140□ ASN320N ASN140□ ASN320N ASN220□ ASN320N ASN220□ ASN320N ASN320N ASN220□ ASN320N ASN220□ ASN320N ASN220□ ASN320N ASN240□ ASN320N ASN340N ASN240□ ASN340N ASN240□ ASN340N ASN240□ ASN340N ASN240□ ASN340N ASN240□ ASN340N ASN340N ASN240□ ASN340N ASN240□ ASN340N ASN340N ASN240□ ASN340N ASN340N ASN240□ ASN340N ASN340N ASN240□ ASN340N ASN240□ ASN340N ASN340N ASN240□ A	,,,,					
Miniature Pilot Lights ASN-T Knob CS CS CS CS CS CS CS C	ø30	,				
ASTN201K22						
ASTN202K22	Miniature		3-position			
ASTN204K22	Dilot Limbto			407110001100		
ASTN205K20	PIIOL LIGHTS					
TWND TWND ARN CS ASN-T Knob Operator CS ASTN51K20 ASN33K20N ASTN51K22 ASN33K22N ASN3K22N-311 ASTN51K11 ASN33K11N-202 ASN120-T ASN320N ASN140-T ASN320N ASN140-T ASN320N ASN220-T ASN3220N ASN220-T ASN3220N ASN240-T ASN3240N						(*1)
TWND ARN CS ASN-T Knob Operator CS ASN-T Knob Operator ASN-T ASN-T Knob Operator ASN-T Knob Operator ASN-T ASN-T Knob Operator ASN-T				ASTN205K40□	ASN31K40N□	(*1)
ASTN52K22 ASN33K22N-311 ASTN51K11 ASN33K11N-202 ASN120-T ASN320N ASN140-T ASN340N ASN20-T ASN320N ASN20-T ASN3220N ASN220-T ASN3220N ASN240-T ASN3240N						
ARN ASN-T Knob Operator CS ASN-T Knob Operator ASN-T Knob Operator ASN-T Knob Operator ASN-T Knob Operator ASN-T ASN-T Knob Operator ASN-T A	TWN					
ASN-T						
ASN-T Knob Coperator 3-position ASN240-T ASN3240N ASN220-T ASN3240N ASN240-T ASN3240N	TWND					
CS	400					
CS Knob Operator 3-position ASN220-1 ASN3220N ASN240-T ASN3240N	ARN	CS ASN-T Knob				
Operator 3-position ASN240-1 ASN3240N	re		-			
			3-position			/***
ASN2U2U-1 ASN312UN (^1)				ASN2020-T	ASN3120N	(*1) (*1)
ASN2040-T ASN3140N (*1)						("1)
ASN1L20-T ASN3L20N						
ASN-T		ASN-T	450			
I lever		Lever				
Operator 3-position ASN2L40-T ASN32L40N ASN20L20-T ASN31L20N (*1)		Operator	o position			/*1\
ASN20L20-1 ASN31L20N (1) ASN20L40-T ASN31L40N (*1)						
NONLOCTO I NONOTETON (1)				O.II.COLTO		\ '/

 Specify a color code in place of * in Part 	No. B (black), G (green), R (red), Y (yellow).
	the control of the character of the control of the

 $[\]square$: Key removable position code. Specify the same code as the old series.

	Old Cari	20		
Model	Old Serio Operator	Old Part No.	New Part No. (*3)	Remarks
Model	oporator	ASN3K10□-T	ASN2K10N□	
ASN■K-T Key Selector	90° 2-position	ASN3K11□-T	ASN2K11N□	
		ASN3K20□-T	ASN2K20N□	
		ASN3K22□-T	ASN2K22N□	
		ASN3K7S□-T	ASN2K2RN□-118	
		ASN4K10-T	ASN21K10N	
		ASN4K11-T ASN4K20-T	ASN21K11N ASN21K20N	
		ASN4K20-T	ASN21K22N	
		ASN4K7S-T	ASN21K2RN-118	
		ASN40K10-T	ASN22K10N	
		ASN40K11-T	ASN22K11N	
		ASN40K20-T	ASN22K20N	
		ASN40K22-T	ASN22K22N	
		ASN40K7S-T	ASN22K2RN-168	
	45° 3-position	ASN1K20□-T	ASN3K20N□	
		ASN1K40□-T	ASN3K40N□	
		ASN1K5S□-T	ASN3K22N□	(*4)
		ASN1K7S□-T	ASN3K02N	(*1) (*1)
		ASN1K8S□-T ASN2K20□-T	ASN3K04N□ ASN32K20N□	(')
		ASN2K40□-T	ASN32K40N□	
		ASN2K5S□-T	ASN32K22N□	
		ASN2K7S□-T	ASN32K02N□	(*1)
		ASN2K8S□-T	ASN32K04N□	(*1)
		ASN20K20□-T	ASN31K20N□	(*1)
		ASN20K40□-T	ASN31K40N□	(*1)
		ASN20K5S□-T	ASN31K22N□	(*1)
		ASN20K7S□-T	ASN31K02N□	
		ASN20K8S□-T	ASN31K04N	
Selector Pushbuttons Ring Operator		ABN6111	ASBN211N-A03	(*2)
		ABN6411□ ABN9111□	ASBN211N-K04□ N/A	(*2)
		ABN7120□	ASBN220N-D01□	
		ABN6122□	ASBN222N-A08□	(*1)
		ABN6222□	ASBN222N-C10□	(*1)
		ABN6422□	ASBN222N-K15□	(*2)
		ABN7122□	ASBN222N-D10□	(*1)
		ABN7222□	ASBN222N-E10□	(*1)
	90°	ABN7322□	ASBN222N-F10□	(*1)
	- 2-position	ABN9122□	N/A	(+ 4)
Selector Pushbuttons Lever Operator		ABN6L111 □	ASBN211N-A03	(*4)
		ABN6L411□ ABN9L111□	ASBN211N-K04□	(*2) (*4)
		ABN6L122□	N/A ASBN222N-A08□	(*1) (*4)
		ABN6L222□	ASBN222N-A00□	(*1) (*4)
		ABN6L422□	ASBN222N-K15□	(*2) (*4)
		ABN7L122□	ASBN222N-D10□	(*1) (*4)
		ABN7L222□	ASBN222N-E10□	(*1) (*4)
		ABN7L322□	ASBN222N-F10□	(*1) (*4)
		ABN9L122□	N/A	
Pushbuttons	Pin Lock	ABN8P10	ABD8P10N□	(*5)
		ABN8P01	ABD8P01N	(*5)
		ABN8P11 ABN8P20	ABD8P11N□ ABD8P20N□	(*5) (*5)
		ABN8P02	ABD8P02N□	(*5)
		ABN8P22	ABD8P22N□	(*5)
	ON Lock Type Pin Lock	ABN8P10-TK231-1	ABD8PN10N□	(*5)
		ABN8P01-TK231-1	ABD8PN01N□	(*5)
		ABN8P11-TK231-1	ABD8PN11N□	(*5)
		ABN8P20-TK231-1	ABD8PN20N□	(*5)
		ABN8P02-TK231-1	ABD8PN02N□	(*5)
		ABN8P22-TK231-1	ABD8PN22N□	(*5)
	Mushroom Pull	ATN2310□	AZN310N	
		ATN2311	AZN311N	
		ATN2320□ ATN2302□	AZN320N□ AZN302N□	
t0) The !			pe. The knob operator can be	

^{*3)} The knob operator is diecast zinc and in new shape. The knob operator can be installed at 45 degrees intervals.

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^{*1)} The location of contacts is different. In application for maintenance purpose, make sure of contact operation before wiring.
*2) Contact operation is same as the old series, but contact type is different.

^{*4)} The new knob operator of selector pushbuttons is ring operator. The old series is lever operator.

^{*5)} Button material New series: plastic / Old series: metal