

APPLICATION NOTE	FECA-AN-142
HAND – OFF – AUTO Switch Wiring Setup and Parameters	

Inverter type	FRENIC-Eco series
Software version	All versions
Required options	None
Related documentation	-
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Revision	

Introduction:

This application note will address the wiring and parameter settings for using a HAND – OFF - AUTO (HOA) switch to control a **FRENIC-Eco** drive.

Terminology

HAND – Frequency and Run commands controlled from keypad (Local mode)

OFF – Drive is stopped, still has power

AUTO – Frequency and Run commands controlled from terminals (Remote mode)

Switch Wiring

HAND – Closes a dry contact creating an electrical short between the drive's **X1** and **CM** terminals.

OFF – Opens all HAND/AUTO contacts.

AUTO – Closes a dry contact between the drive's **FWD** and **CM** terminals. This is to be wired in series with customer supplied dry contact (labelled CSC1 in wiring diagram on page 2) from PLC or RUN relay.

Common Examples

Typical uses of this application include operating under following conditions:

HAND – Drive is controlled from keypad.

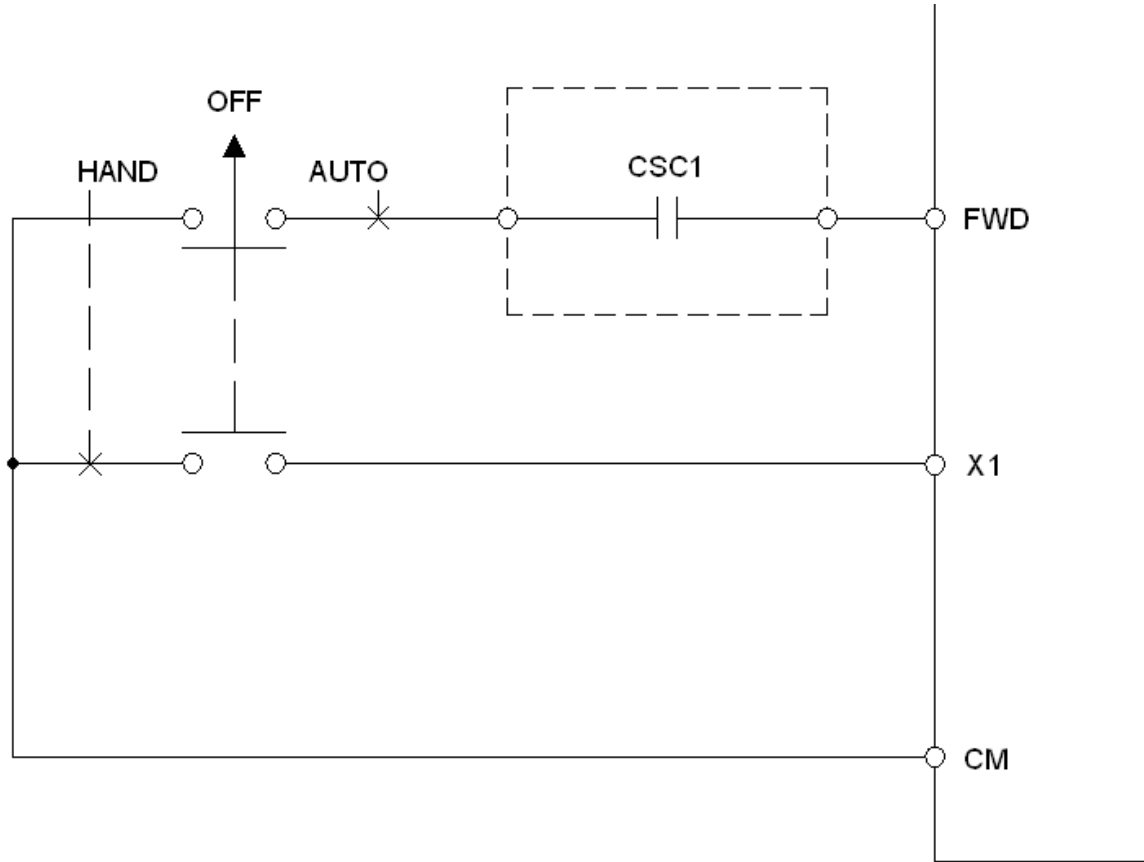
OFF – Drive stops.

AUTO – Drive controlled by PLC. Forward Run command given by dry contact closure (CSC1, wired in series with AUTO dry contact) creating an electrical short between the drive's **FWD** and **CM** terminals. The speed controlled by 0-10VDC signal from PLC going to drive terminals **11** and **12** (or 4-20mA signal to terminals **11** and **C1**).

Parameters:

Code	Setting	Name
F01	1 (0-10VDC to terminal 12) 2 (4-20mA to terminal C1) 3 (Sum of V and mA to 12 and C1) 5 (1-10VDC to terminal V2) 7 (Enable terminal UP/DOWN control)	Frequency Command 1 (AUTO)
F02	1 (Terminal FWD/REV)	Run Command (AUTO)
E01	35 (Select Local (Keypad) Operation)	X1 Terminal Function (HAND)

Wiring Diagram:



Note: All contacts are to be supplied by customer. For more information refer to **FRENIC-Eco Instruction Manual (INR-SI47-1225-E)**.