rev	change date	revision	name
h			
g			
f			
e	12.08.21	Change polarity on incoming line to match SY Changed control board to new pin config	DJG
d	08.12.19	Changed title to show PA-PD	DJG
c	11.06.17	Change polarity on control board for line and motor for new board introduced Jan 18	DJG
b	11.06.17	Change AC lines to match DC	DJG
a	03.09.16	New WD: Replaces 850-B2801; B3801. Control Board P/N, wire colors. Dual power inputs.	TJM

naming

dwn	by:	Date	
	TJM	01.29.2015	.

material no

ind

Wiring Diagram

material

scale NONE

12/7/2021 1:31 PM

ProMation

WD-850-EAB02 E

On/Off wiring diagram for 24VAC or 24VDC PA-PD(O)Series CCW Spring Return Actuators.

REV E

WD-850-EAB02 E.dwg

0° - 5° *
5° - 90° *
COM *
85° - 90° *
0° - 85° *
COM *
* CONNECTIONS OPTIONAL

ACL ANC ACC AOP ANO AOC

F E D C B A

BLK BRN WHT GRY BLU RED

AUXILIARY SWITCH (STANDARD)

AS4 NO COM NC

AUXILIARY SWITCH (STANDARD)

AS3 NO NC COM NC

SPRING RTN (FULL CCW) -5° 0° 5°

LOAD SPRING (FULL CW) 85° 90° 95°

F
E
D COM SW4
C
B
A COM SW3

15W 120Ω HEATER

7 (on Riser) WHT16
6
5
4
3 BLU16
1 RED16
HOT

WHT22 - NOT POLARIZED

AC Only

35A

Blu16 Blu16 Red16 Blk16

AC1 AC2 V+ V-

Red16 Blu16

4 3 2 1

250V 6.3A 5x20 FB

SA176H-24 408-30260

(Jumpers) DC Only

LD1 LD3

WHT22 - NOT POLARIZED

24VDC Brake

LINE IN
24VAC 24VDC
H -
N +

FIELD CONTROL DEVICE LOAD

GND

GND Screw

RED CAM NO LS2 COM NC

GRY22 NON POLARIZED

GRN CAM NO LS1 COM NC

BLU22 NON POLARIZED

SA-176J J1

SA-176A J1 (LS2) J3 (LS1)

U2

J2

LD2 LD4

Red

Blk

Ferrite Bead

M

24VDC DRIVE MOTOR

THERMAL SWITCH

AS4 RED
AS3 GRN
LS2 RED
LS1 GRN

NC NO COM

GRY22 TO J1

BLU22 TO J3

Switch Stack Detail

OPEN showing in indicator window = FULLY LOADED (CW)

CLOSED showing in indicator window = FULL SPRING RTN (CCW)

FIELD WIRING

INTERNAL ACTUATOR WIRING

Actuator ships in the fully UNLOADED (CCW) position!

Use For:

PA-PD(O)-CCW-24A/D2S4 (7)

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