rev	change date	revision	name
A	10.09.17	B5B02 (C) voltage change	DJG
B	03.19.19	Added Thermal Switch option to heater	DJG

naming | material no | ind | material

scale NONE | dwn by: BJW | Date 10.20.2014 | . | Wiring Diagram

ProMation

4/1/2019 5:51 PM

WD-850-B4B02 B.dwg

On/Off wiring diagram for 120VAC PB(O) CCW Spring Return with internal motor thermo-switch bypass out (BTC).

REV B

WD-850-B4B02 B

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

ACL F
ANC E
ACC D
AOP C
ANO B
AOC A

BLK16
BRN16
WHT16
GRY16
BLU16
RED16

AS4 RED CAM — NO / COM / NC
AS3 GRN CAM — NO / COM / NC

AUXILIARY SWITCH (STANDARD)
AUXILIARY SWITCH (STANDARD)

SPRING RTN (FULL CCW)
LOAD SPRING (FULL CW)
-5° 0° 5° 85° 90° 95°
F
E
D COM SW4
C
B
A COM SW3

Thermal Circuit Dry Contact

Open - Thermal Overload Circuit is functional and motor will stop due to Motor Over Temperature

Closed - Thermal Overload Circuit is bypassed Motor will NOT stop running due to Motor Over Temperature

THERMAL SWITCH

HOT 7
6
5
4
3 BLU16
DRV
1 RED16
NEU

15W 6K8 HEATER

FIELD CONTROL DEVICE
LOAD

H
N
120VAC LINE IN
GND
GND Screw

WHT16
WHT16
WHT22 - NOT POLARIZED

24VDC Brake
BLK16
THERMAL DRY CONTACT SWITCH
Capacitor
M
120V AC DRIVE MOTOR
WHT16
RED16

SA176H 408-30278
4 3 2 1
250V 6.3A 5x20 FB
120/230:24VDC DCPS (perm attach to base PCB)
J1
J2
J3
LD2 LD1 LD3 LD4
U2

LS2 NO / COM / RED CAM / NC
GRY22 NON POLARIZED

LS1 NO / COM / GRN CAM / NC
BLU22 NON POLARIZED

LED1 - Power

LED3 - Fully OPEN Position

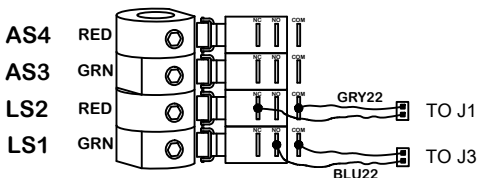
LED 2 - Driving in the LOAD Direction.

LED 4 - In Spring Return and Restart Delay after Power Trip.

FIELD WIRING
INTERNAL ACTUATOR WIRING

OPEN showing in indicator window = FULLY LOADED (CW)
CLOSED showing in indicator window = FULL SPRING RTN (CCW)

Actuator ships in the fully UNLOADED (CCW) position!



Switch Stack Detail

Use For:

ProMation Engineering, Inc.
16138 Flight Path Drive
Brooksville, FL 34604
Ph:352-544-8436 Fx(352-544-8439

PB/PBO-CCW-1202S4-BTC

This document is the property of ProMation Engineering, Inc.
Distribution of this document without the written consent of the owner is strictly forbidden.
Failure to comply will incur a liability for damages.