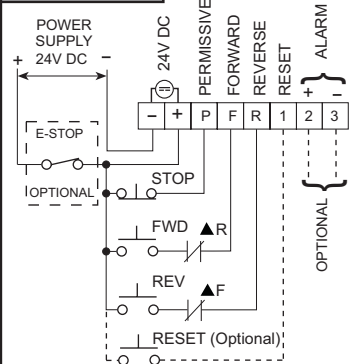


NEMA

Reversing Starter

Size 00&0

3-Wire Control



▲ FORWARD - STOP - REVERSE

Optional auxiliaries R & F are needed if a stop command is required before changing the motor direction.

R = N.C. logic level auxiliary contact (EMA70) attached to the reversing contactor.

F = N.C. logic level auxiliary contact (EMA70) attached to the forward contactor.

CONTROL POWER / 24 VOLTS DC ONLY

POWER REQUIRED PER DEVICE @ 20°C (68°F)

Inrush: 80 watts, 3.3 amps, 50 msec duration

Sealed: 3.2 watts, 0.13 amps

At other temperatures (T) in °C

$$\left. \begin{aligned} \text{Watts} &= W_{20} [1.1 - .005(T)] \\ \text{Amps} &= A_{20} [1.1 - .005(T)] \end{aligned} \right\} \begin{array}{l} \text{Inrush} \\ \text{or} \\ \text{Sealed} \end{array}$$

Example: Inrush watts @ -25°C
 $80 [1.1 - .005(-25)] = 98 \text{ watts}$

24V DC POWER SUPPLY REQUIRED

Select supply based on power required per device
 Recommend Cutler-Hammer PS Series

24V DC CONTROLS REQUIRED

24V DC, 3-5mA

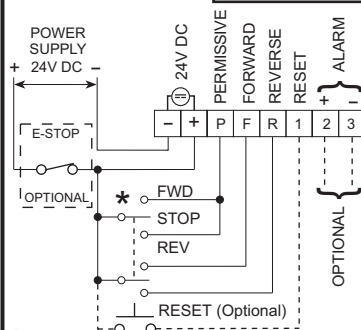
Recommend Cutler-Hammer Logic Level Series or contact blocks with reliability "nibs".

ALARM OUTPUT (optional)

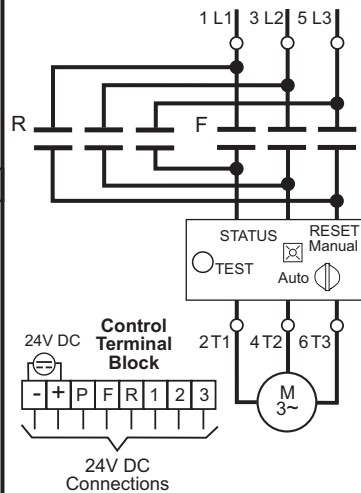
Open collector or emitter type
 24V DC @ 0.25 amps



2-Wire Control



* MAINTAINED ONLY
 2-WIRE REMOTE PILOT DEVICE



Note: Remove Control Terminal Block before wiring of T1, T2, & T3.

DISCONNECT AC POWER BEFORE WORKING ON THIS PRODUCT

AUXILIARY CONTACTS

| Max. Qty. | Cat. No. | Description |
|-----------|----------|-----------------------|
| 6 | EMA13 | 1 N.O. |
| 6 | EMA14 | 1 N.C. |
| 4 | EMA15 | 1 N.O. - 1 N.C. |
| 4 | EMA16 | 2 N.O. |
| 4 | EMA17 | 2 N.C. |
| 4 | EMA70 | 1 N.O.-1 N.C. (Logic) |

CONTROL TERMINAL BLOCK

| Wire | - + | P F R 1 2 3 |
|------------------|---|--|
| 1 per Terminal | 1.5 - 2.5mm ² [14 - 12 Awg] | 0.5 - 2.5mm ² [22 - 12 Awg] |
| 2 per Terminal | 1.5mm ² [14 Awg] | 0.75 - 1.5mm ² [18 - 14 Awg] |
| Strip Length | Driver | Torque (Max.) |
| 7mm [0.27 in] | 3.5mm [1/8 in] | 0.5 N-m [4.5 LB-IN] |

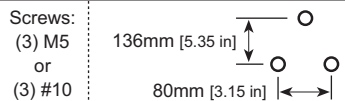
CONTROL CIRCUIT FUSEHOLDER

Cat. No. C320FB or C320FBR

L1, L2, L3 / T1, T2, T3

75°C Copper Wire only

MOUNTING HOLES



AMBIENT TEMPERATURE

Operating: -40°C to 65°C [-40°F to 149°F]
 Storage: -50°C to 80°C [-58°F to 176°F]

| Strip Length | Driver | Torque (Max.) | Wire Range |
|-------------------|------------------|-----------------------|---------------------------------------|
| 11mm [0.45 in] | Hex Key 2.5mm | 2.2 N-m [20 LB-IN] | 1.5 - 6mm ² [14-10 Awg] |
| | | 2.8 N-m [25 LB-IN] | 10mm ² [8 Awg] |

SHORT CIRCUIT WITHSTAND RATING

UL 508 and CSA C22.2 No. 14-95

SUITABLE FOR USE ON A CIRCUIT CAPABLE OF DELIVERING NOT MORE THAN 5000 rms SYMMETRICAL AMPERES, 600 VOLTS MAXIMUM WHEN PROTECTED BY CLASS K5-FUSES, TIME DELAY FUSES PER NEC/CEC OR INVERSE-TIME CIRCUIT BREAKERS (THERMAL MAGNETIC).

pub50143 (A) Mar. 2002 - Also refer to pub50200 or www.cutler-hammer.eaton.com/it