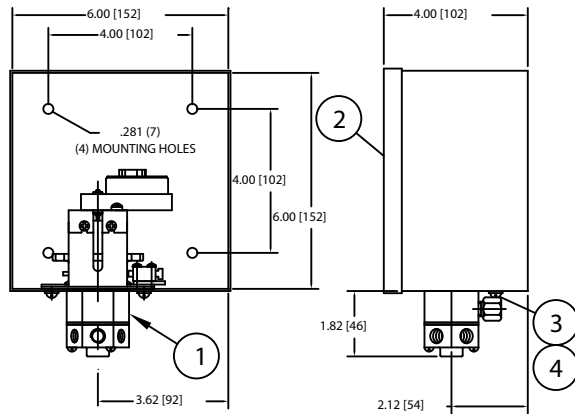


| NO. | DESCRIPTION | PART NO. | QTY. |
|-----|---|-----------------------|---------|
| 1 | STAGER ASSEMBLY | R048- - B | 1 |
| 2 | ENCLOSURE | NEMA 1 | 1075751 |
| | | NEMA 4 | 1077966 |
| | | NEMA 4XFG | 1077969 |
| 3 | PAN HEAD MACHINE SCREW 10-32 x 1/2" LONG | 1075758 (510-BU) | 2 |
| 4 | LOCKWASHER (NO. 10) | 1073588 (WAS-0005) | 2 |

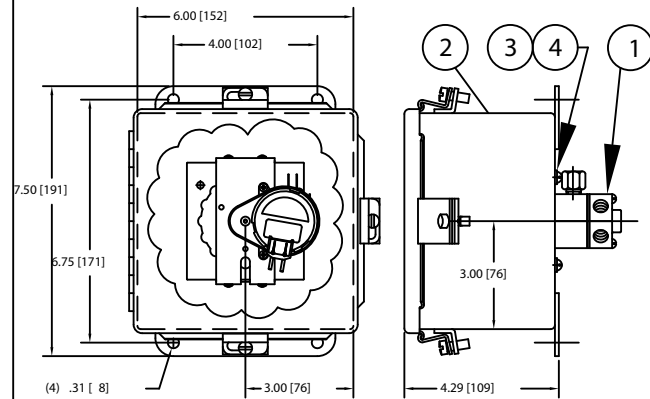
- NOTE:**
1. STAGERS CAN BE MANUALLY ADVANCED BY ROTATING THE CAM CLOCKWISE.
 2. PIPING SCHEMATICS AVAILABLE UPON REQUEST.
 3. ALL STAGERS EXCEPT 48-03 & 48-TA SUPPLIED WITH NOTCHED CAM FOR PULSE OUTPUT TYPE TIMERS. 48-03 & 48-TA SUPPLIED WITH BUTTERFLY CAM FOR "UP/DOWN" OUTPUT TYPE TIMERS.

INCHES [MILLIMETERS]


NEMA 1 ENCLOSURE



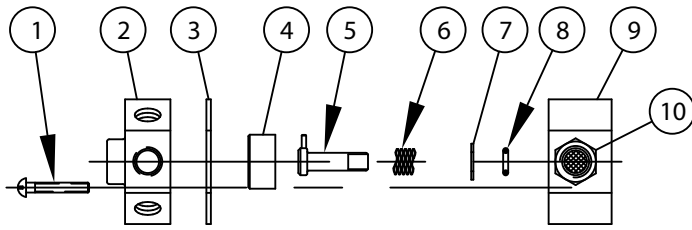
NEMA 4 ENCLOSURE



| SERIES NO. | PORTS VENTED IN POSITION | | | | | | DESCRIPTION |
|------------|--------------------------|--------|----------|----------|----------|----------|--------------------------------|
| | A | B | C | D | E | F | |
| 48-00 | 1,2 (SVC) | - | 3,4 (BW) | - | 5,6 (BR) | 1,6 (FR) | 4 POS. SOFTENER |
| 48-01 | 1,2 (SVC) | - | 3,4 (BW) | - | - | 1,6 (FR) | 3 POS. FILTER |
| 48-03 | 1,2 (SVC) | - | 3,4 (BW) | - | 5,6 (BR) | 1,6 (FR) | 4 POS. SOFTENER (SEE NOTE 3) |
| 48-04 | 1,2 (SVC) | - | 3,4 (BW) | - | - | - | 2 POS. FILTER |
| 48-12 | 1,2 (SVC) | - | 3,4 (BW) | 4,5 (BR) | - | 1,6 (FR) | 4 POS. SOFTENER W/UPFLOW BRINE |
| 48-83 | 2 (BW) | 3 (BW) | - | - | 6 (SVC) | 1 (BW) | 3 TANK SEQUENTIAL FILTER |
| 48-84 | 2 (BW) | 3 (BW) | 4 (BW) | - | 6 (SVC) | 1 (BW) | 4 TANK SEQUENTIAL FILTER |
| 48-85 | 2 (BW) | 3 (BW) | 4 (BW) | 5 (BW) | 6 (SVC) | 1 (BW) | 5 TANK SEQUENTIAL FILTER |
| 48-TA | 1 | - | 2 | - | - | - | 2 TANK ALTERNATOR (SEE NOTE 3) |
| 48-TB | 1 | 2 | 1 | 2 | 1 | 2 | 2 TANK ALTERNATOR |

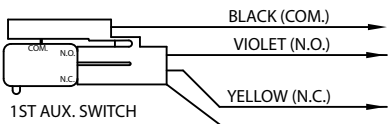
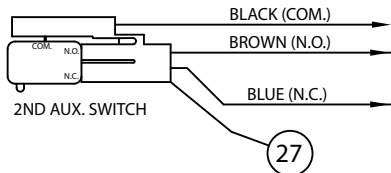
| D | ITEM NO. 3 WAS P/N 1074842 | NONE | 15SEP03 | |
|--|----------------------------|---------|----------|------|
| REV. | DESCRIPTION | ECO | DATE | APVD |
|  OSMONICS <small>ROCKFORD OPERATIONS</small> <small>2412 GRANT AVENUE, ROCKFORD, IL 61103-3991 (815) 964-9421</small> <small>WWW.OSMONICS.COM</small> | | | | |
| SERIES 48 STAGER PROGRAMS AND MOUNTING DRAWING | | | | |
| SCALE | DRAWN | DATE | DWG. NO. | |
| N/A | MSM | 11Apr01 | 1077882 | |

PILOT CONTROL ASSEMBLY



OPTIONAL AUX. SWITCHES

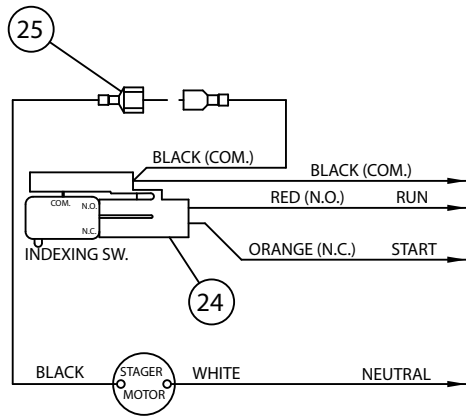
MAXIMUM OF TWO (2)



SWITCH RATINGS

- 11A 1/3HP
- 125, 250, 277 VAC
- 1/2A 125 VDC
- 1/4A 250 VDC
- 4A 125 VAC L

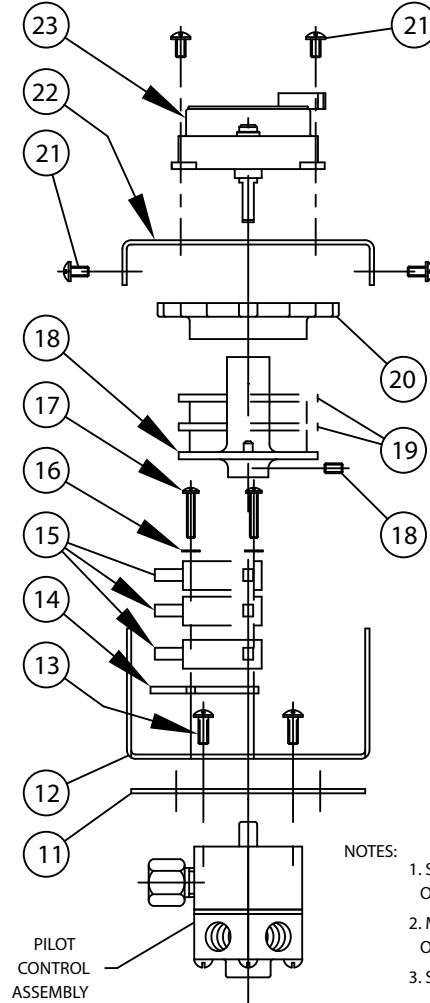
STANDARD WIRING



INTERNAL PARTS KITS

| STAGER PROGRAM | INTERNAL PARTS KITS STD. PROGRAMS | INTERNAL PARTS KITS INVERTED PROGRAMS |
|----------------|--------------------------------------|--|
| 48-00 | 1074817 (48-IA-B) | 1081595 (48-IA-BI) |
| 48-01 | | |
| 48-03 | | |
| 48-04 | | |
| 48-11 | | |
| 48-12 | 1081593 (48-IA-83) | 1081594 (48-IA-83I) |
| 48-TA | | |
| 48-83 | | |
| 48-84 | | |
| 48-85 | 1077584 (48-IA-TB) | |
| 48-TB | | |
| 48-SP | 1084816 (48-IA-SP) | SPECIFY DWG. NO. WHEN ORDERING THESE PARTS |

* INTERNAL PARTS KITS INCLUDE ITEM NOS. 3, 4, 6, 7 & 8
ALONG WITH A SMALL PACKET OF SILICON COMPOUND



NOTES:

1. STAGER PROGRAM MUST BE SPECIFIED WHEN ORDERING THIS PART.
2. MUST SPECIFY IN WHICH POSITION(S) SWITCH OUTPUT(S) ARE REQUIRED.
3. SUPPLIED AS A KIT ONLY.

| NO. | DESCRIPTION | PART NO. | QTY. |
|-----|---|--------------------|--------------------|
| 1 | RD HD. MACH. SCR. (6-32 X 7/8") | 1075759 (SCS-0075) | 3 |
| 2 | BACKPLATE | PER PROGRAM | 1 |
| 3 | GASKET (SEE NOTE 3) | 1084171 | 1 |
| 4 | STEMPLATE (SEE NOTE 3) | PER PROGRAM | 1 |
| 5 | STEMSHAFT | 1070448 | 1 |
| 6 | SPRING (SEE NOTE 3) | 1076234 | 1 |
| 7 | WASHER (SEE NOTE 3) | 1074074 (41-F) | 1 |
| 8 | O-RING (SEE NOTE 3) | 1071667 (ORB-010) | 1 |
| 9 | BONNET | 1074793 (48-B) | 1 |
| 10 | FILTERED INLET (1/8" N.P.T.) | 1074825 (48-Q) | 1 |
| 11 | MOUNTING PLATE GASKET | 1075737 | 1 |
| 12 | BOTTOM MOUNTING BRACKET | 1070437 | 1 |
| 13 | PAN HD. MACH. SCR. (6-32 X 3/8") | 1072371 (SCS-0070) | 4 |
| 14 | INSULATOR | 1075455 (58B019) | 1 |
| 15 | SWITCH | 1075499 (58013) | 1-3 |
| 16 | LOCKWASHER (NO. 4) | 1073593 (WAS-0015) | 2 |
| 17 | PAN HD. MACH. SCREW (4-40 THREAD) | 1 SWITCH | 1072369 (SCS-0064) |
| | | 2 SWITCHES | 1075757 (SCS-0065) |
| | | 3 SWITCHES | 1072389 (SCS-0151) |
| 18 | 48-00 INDEXING CAM 48-01 INDEXING CAM 48-03 INDEXING CAM 48-TA INDEXING CAM ALL OTHERS (SEE NOTE 1) *CAMs INCLUDE 6-32 SET SCREW | 1076245 | 1 |
| | | 1076244 | |
| | | 1076246 | |
| | | 1077932 | |
| | | 1076243 | |
| 19 | AUXILIARY CAM (SEE NOTE 2) | 1075451 (58B017) | 0-2 |
| 20 | THUMB WHEEL | 1075454 (58B018) | 1 |
| 21 | TAPTITE SCREW (6-32 X 1/4") | 1075746 | 6 |
| 22 | MOTOR MOUNTING BRACKET | 1070436 | 1 |
| 23 | MOTOR (4 WATTS MAX.) | 115VAC 60HZ | 1075748 |
| | | 230VAC 50/60HZ | 1075749 |
| | | 24VAC 50/60HZ | 1075750 |
| | | 12VAC 50/60HZ | 1075753 |
| 24 | WIRE HARNESS (STANDARD) | 1075464 (58B030) | 1 |
| 25 | MALE CONNECTOR | 1075498 (58012) | 1 |
| 26 | WIRE HARNESS (1ST AUX. SWITCH) | 1075501 (58015) | 1 |
| 27 | WIRE HARNESS (2ND AUX. SWITCH) | 1075502 (58016) | 1 |

| | | | | |
|------|----------------------------|------|---------|------|
| D | ITEM NO. 3 WAS P/N 1074842 | NONE | 15SEP03 | |
| REV. | DESCRIPTION | ECO | DATE | APVD |

OSMONICS
ROCKFORD OPERATIONS

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WWW.OSMONICS.COM

SERIES 48 STAGER ASSEMBLY ASSEMBLY DRAWING

| | | | |
|--------------|--------------|-----------------|---------------------|
| SCALE 3/8 | DRAWN MSM | DATE 11APR01 | DWG. NO. 1077882 |
|--------------|--------------|-----------------|---------------------|

Form No. 1077881

SERIES 48 STAGER ASSEMBLY