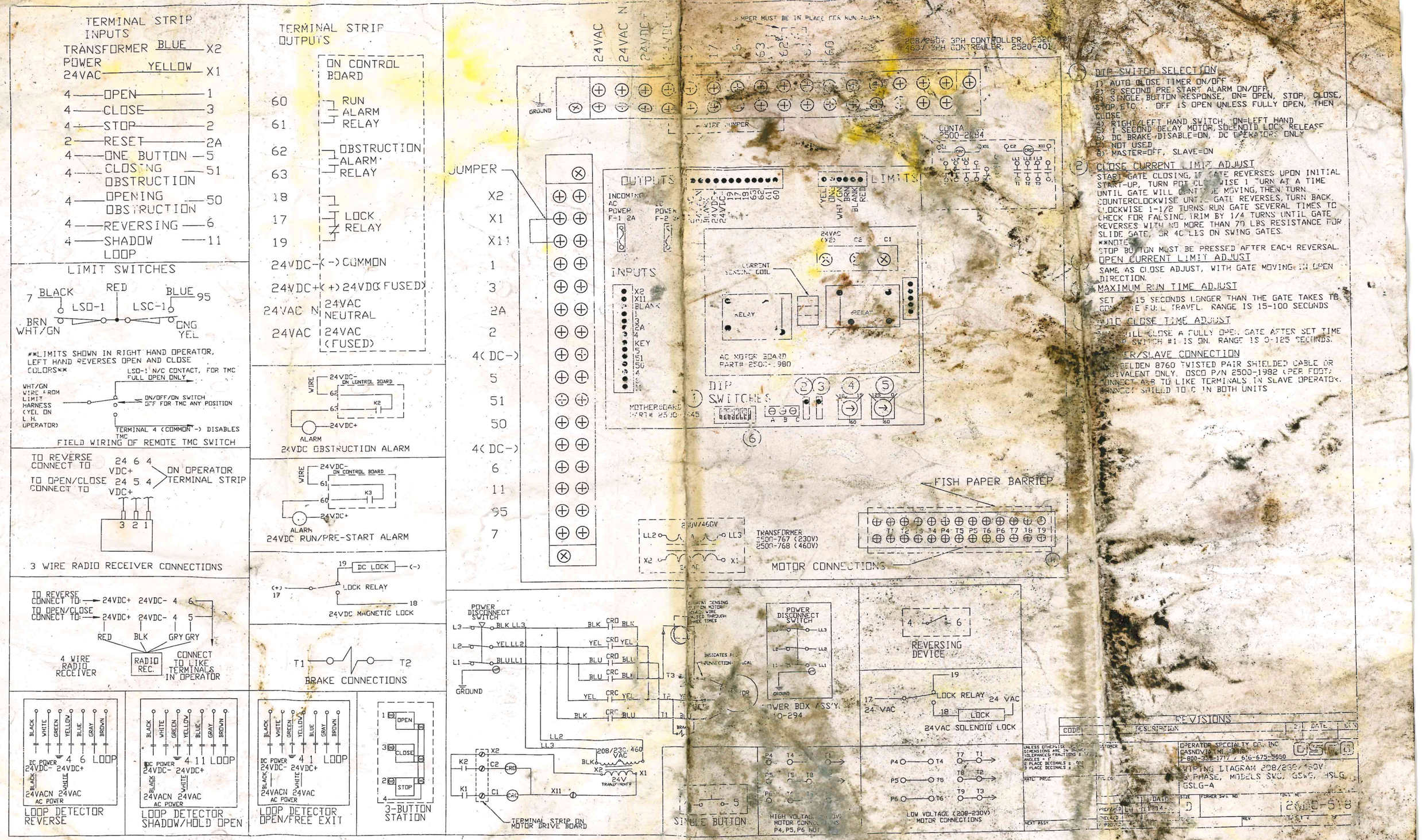
TERMINAL STRIP INPUTS
TRANSFORMER POWER 24VAC
BLUE X2
YELLOW X1
4 OPEN 1
4 CLOSE 3
4 STOP 2
2 RESET 2A
4 ONE BUTTON 5
4 CLOSING OBSTRUCTION 51
4 OPENING OBSTRUCTION 50
4 REVERSING 6
4 SHADOW LOOP 11
TERMINAL STRIP OUTPUTS
ON CONTROL BOARD
60 RUN
61 ALARM RELAY
62 OBSTRUCTION ALARM RELAY
63
18
17 LOCK RELAY
19
24VDC- (-) COMMON
24VDC+ (+) 24VDC (FUSED)
24VAC N 24VAC NEUTRAL
24VAC 24VAC (FUSED)
LIMIT SWITCHES
7 BLACK
RED
BLUE 95
LSO-1
LSC-1
BRN WHT/GN
ORNG YEL
LIMITS SHOWN IN RIGHT HAND OPERATOR, LEFT HAND REVERSES OPEN AND CLOSE COLORS
LSO-1 N/C CONTACT, FOR TMC FULL OPEN ONLY
WHT/GN WIRE FROM LIMIT HARNESS (YEL ON L.H. OPERATOR)
ON/OFF/ON SWITCH OFF FOR TMC ANY POSITION
TERMINAL 4 (COMMON -) DISABLES TMC
FIELD WIRING OF REMOTE TMC SWITCH
TO REVERSE CONNECT TO 24 6 4 VDC+
TO OPEN/CLOSE CONNECT TO 24 5 4 VDC+
ON OPERATOR TERMINAL STRIP
3 2 1
3 WIRE RADIO RECEIVER CONNECTIONS
TO REVERSE CONNECT TO: 24VDC+ 24VDC- 4 6
TO OPEN/CLOSE CONNECT TO: 24VDC+ 24VDC- 4 5
RED BLK GRY GRY
RADIO REC.
4 WIRE RADIO RECEIVER
CONNECT TO LIKE TERMINALS IN OPERATOR
WIRE 24VDC- ON CONTROL BOARD
62
63
K2
24VDC+
ALARM
24VDC OBSTRUCTION ALARM
WIRE 24VDC- ON CONTROL BOARD
61
60
K3
24VDC+
ALARM
24VDC RUN/PRE-START ALARM
19 DC LOCK (-)
(+) 17 LOCK RELAY
18
24VDC MAGNETIC LOCK
T1 T2
BRAKE CONNECTIONS
BLACK WHITE GREEN YELLOW BLUE GRAY BROWN
DC POWER 24VDC- 24VDC+
4 6 LOOP
24VACN 24VAC
AC POWER
LOOP DETECTOR REVERSE
4 11 LOOP
LOOP DETECTOR SHADOW/HOLD OPEN
4 1 LOOP
LOOP DETECTOR OPEN/FREE EXIT
OPEN
CLOSE
STOP
3-BUTTON STATION
JUMPER
X2
X1
X11
1
3
2A
2
4(DC-)
5
51
50
4(DC-)
6
11
95
7
GROUND
24VAC
24VAC N
24VDC+
24VDC-
JUMPER MUST BE IN PLACE FOR RUN ALARM
208/230v 3PH CONTROLLER, 2520-400
460V 3PH CONTROLLER, 2520-401
WIRE JUMPER
OUTPUTS
INCOMING AC POWER F-1 2A
DC POWER F-2 3A
INPUTS
MOTHERBOARD PART# 2500-1045
LIMITS
YEL ORNG WHT/GN BRN BLANK RED
CONTA 2500-2194
24VAC (X2) C2 C1
CURRENT SENSING COIL
RELAY
AC MOTOR BOARD PART# 2500-1980
DIP SWITCHES
A B C
VR1 VR2
160
TRANSFORMER 2500-767 (230V) 2500-768 (460V)
LL2 LL3 X2 X1
MOTOR CONNECTIONS
FISH PAPER BARRIER
T1 T2 T3 T4 P4 T5 P5 T6 P6 T7 T8 T9
POWER DISCONNECT SWITCH
L3 L2 L1
BLK LL3
YEL LL2
BLU LL1
GROUND
CRO
CRC
T3 T2 T1
LL2 LL3
208/230/460 VAC
X2 X1
24V TRANSFORMER
K2 K1 C2 C1 X11
TERMINAL STRIP ON MOTOR DRIVE BOARD
POWER BOX ASS'Y. 10-294
REVERSING DEVICE
4 6
LOCK RELAY
17 24 VAC
19
18 LOCK
24VAC SOLENOID LOCK
SINGLE BUTTON
HIGH VOLTAGE (460V) MOTOR CONNECTIONS P4, P5, P6 NOT USED
LOW VOLTAGE (208-230V) MOTOR CONNECTIONS
P4 T4 T7 T1
P5 T5 T8 T2
P6 T6 T9 T3
DIP SWITCH SELECTION
1) AUTO CLOSE TIMER ON/OFF
2) 3 SECOND PRE-START ALARM ON/OFF
3) SINGLE BUTTON RESPONSE, ON= OPEN, STOP, CLOSE, STOP, ETC... OFF IS OPEN UNLESS FULLY OPEN, THEN CLOSE
4) RIGHT/LEFT HAND SWITCH, ON=LEFT HAND
5) 1 SECOND DELAY MOTOR, SOLENOID LOCK RELEASE
6) DC BRAKE/DISABLE=ON, DC OPERATORS ONLY
7) NOT USED
8) MASTER=OFF, SLAVE=ON
CLOSE CURRENT LIMIT ADJUST
START GATE CLOSING, IF GATE REVERSES UPON INITIAL START-UP, TURN POTCLOCKWISE 1 TURN AT A TIME UNTIL GATE WILL CONTINUE MOVING, THEN TURN COUNTERCLOCKWISE UNTIL GATE REVERSES, TURN BACK CLOCKWISE 1-1/2 TURNS RUN GATE SEVERAL TIMES TO CHECK FOR FALSING. TRIM BY 1/4 TURNS UNTIL GATE REVERSES WITH NO MORE THAN 70 LBS RESISTANCE FOR SLIDE GATE, OR 40 LBS ON SWING GATES.
**NOTE
STOP BUTTON MUST BE PRESSED AFTER EACH REVERSAL.
OPEN CURRENT LIMIT ADJUST
SAME AS CLOSE ADJUST, WITH GATE MOVING IN OPEN DIRECTION.
MAXIMUM RUN TIME ADJUST
SET TO 15 SECONDS LONGER THAN THE GATE TAKES TO COMPLETE FULL TRAVEL. RANGE IS 15-100 SECONDS
AUTO CLOSE TIME ADJUST
WILL CLOSE A FULLY OPEN GATE AFTER SET TIME IF SWITCH #1 IS ON. RANGE IS 0-125 SECONDS.
MASTER/SLAVE CONNECTION
BELDEN 8760 TWISTED PAIR SHIELDED CABLE OR EQUIVALENT ONLY. OSCO P/N 2500-1982 (PER FOOT). CONNECT A&B TO LIKE TERMINALS IN SLAVE OPERATOR. CONNECT SHIELD TO C IN BOTH UNITS
REVISIONS
CODE DESCRIPTION BY DATE
UNLESS OTHERWISE DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONS ± ANGLES ± 1°
2 PLACE DECIMALS ± .015
3 PLACE DECIMALS ± .005
OPERATOR SPECIALTY CO., INC
GASNOVIA, MO 64136
1-800-366-1717 / 816-675-5050
OSCO
WIRING DIAGRAM 208/230/460V 3 PHASE, MODELS SWO, GSWO, HSLG, GSLG-A
SIZE D
2500-518