

system software

WIRING AND INTERFACING GUIDE FOR 4-HEAD WEIGHING-HMI CONTROL SYSTEM PANEL

Controller type	Model no.
Weigher	SS-DH-WGHR-V4
PLC	SS-PLC-V4
Vibration Controller	SS-VIB-V1
Loadcells	MaxLoad-TT

WIRING CHART FOR WEIGHING CONTROLLER**WIRING FOR HEAD-1 AND HEAD-2**

POINT ON CONTROLLER	SIGNAL TYPE	SIGNAL NAME	CONNECTION
SH-1	OUTPUT 24V+	SHUTTER 1	SHUTTER SOLENOID RELAY INPUT +
CR-1	OUTPUT 24V+	COARSE 1	-
FN-1	OUTPUT 24V+	FINE 1	-
SF-1	OUTPUT 24V+	SUPERFINE 1	-
DR-1	OUTPUT 24V+	DRAIN 1	MATERIAL DRAIN SOLENOID RELAY INPUT +
RD-1	OUTPUT 24V+	READY 1	CONNECT TO X4 OF SSPLC-V4
VC-1	OUTPUT 24V+	VIBRATION ON/OFF 1	VIBRATOR CONTROLLER POINT NO. 9
EX-1	PULSE OUTPUT	MOTOR CONTROL	-
SH-2	OUTPUT 24V+	SHUTTER 2	SHUTTER SOLENOID RELAY INPUT +
CR-2	OUTPUT 24V+	COARSE 2	-
FN-2	OUTPUT 24V+	FINE 2	-
SF-2	OUTPUT 24V+	SUPERFINE 2	-
DR-2	OUTPUT 24V+	DRAIN 2	MATERIAL DRAIN SOLENOID RELAY INPUT +
RD-2	OUTPUT 24V+	READY 2	CONNECT TO X5 OF SSPLC-V4
VC-2	OUTPUT 24V+	VIBRATION ON/OFF 2	VIBRATOR CONTROLLER POINT NO. 9
EX-2	PULSE OUTPUT	MOTOR CONTROL	-
X0	INPUT	-	HEAD-1 CYCLE (Y12) OF SSPLC-V4
X1	INPUT	-	-
X2	INPUT	-	-
X3	INPUT	-	-
X4	INPUT	-	HEAD-2 CYCLE (Y13) OF SSPLC-V4
X5	INPUT	-	-
X6	INPUT	-	-
X7	INPUT	-	-
485-B	HMI COMM.	RS-485 B (WHITE)	CONNECT FROM HMI'S 2-CORE SHIELDED RS-485 COMMUNICATION CABLE
485-A	HMI COMM.	RS-485 A (BROWN)	
SH	-	-	SHIELD OF 2-CORE ANALOG OUTPUT CABLE
1A+	ANALOG O/P +	+VE OF 0-10V ANALOG O/P	RED WIRE OF 2-CORE SHIELDED CABLE. CONNECT TO POINT NO. 7 (10v) OF ANALOG INPUT OF VIBRATION CONTROLLER-1
1A-	ANALOG O/P -	-VE OF 0-10V ANALOG O/P	BLACK WIRE OF 2-CORE SHIELDED CABLE. CONNECT TO POINT NO. 6 (0V) OF ANALOG INPUT OF THE VIBRATION CONTROLLER-1
SH	-	-	SHIELD OF 2-CORE ANALOG OUTPUT CABLE
2A+	ANALOG O/P +	+VE OF 0-10V ANALOG O/P	RED WIRE OF 2-CORE SHIELDED CABLE. CONNECT TO POINT NO. 7 (10v) OF ANALOG INPUT OF VIBRATION CONTROLLER-2
2A-	ANALOG O/P -	-VE OF 0-10V ANALOG O/P	BLACK WIRE OF 2-CORE SHIELDED CABLE. CONNECT TO POINT NO. 6 (0V) OF ANALOG INPUT OF THE VIBRATION CONTROLLER-2

24V+	POWER INPUT	+VE OF 24VDC SMPS	+VE OF 24VDC SMPS
0V	POWER INPUT	0V OF SMPS	0V OF SMPS
LOADCELL 1	ANALOG I/P	LOADCELL INTERFACE	CONNECT THE LOADCELL CABLE OF HEAD 1
LOADCELL 2	ANALOG I/P	LOADCELL INTERFACE	CONNECT THE LOADCELL CABLE OF HEAD 2

WIRING FOR HEAD-3 AND HEAD-4

POINT ON CONTROLLER	SIGNAL TYPE	SIGNAL NAME	CONNECTION
SH-1	OUTPUT 24V+	SHUTTER 3	SHUTTER SOLENOID RELAY INPUT +
CR-1	OUTPUT 24V+	COARSE 3	-
FN-1	OUTPUT 24V+	FINE 3	-
SF-1	OUTPUT 24V+	SUPERFINE 3	-
DR-1	OUTPUT 24V+	DRAIN 3	MATERIAL DRAIN SOLENOID RELAY INPUT +
RD-1	OUTPUT 24V+	READY 3	CONNECT TO X6 OF SSPLC-V4
VC-1	OUTPUT 24V+	VIBRATION ON/OFF 3	VIBRATOR CONTROLLER POINT NO. 9
EX-1	PULSE OUTPUT	MOTOR CONTROL 3	-
SH-2	OUTPUT 24V+	SHUTTER 4	SHUTTER SOLENOID RELAY INPUT +
CR-2	OUTPUT 24V+	COARSE 4	-
FN-2	OUTPUT 24V+	FINE 4	-
SF-2	OUTPUT 24V+	SUPERFINE 4	-
DR-2	OUTPUT 24V+	DRAIN 4	MATERIAL DRAIN SOLENOID RELAY INPUT +
RD-2	OUTPUT 24V+	READY 4	CONNECT TO X7 OF SSPLC-V4
VC-2	OUTPUT 24V+	VIBRATION ON/OFF 4	VIBRATOR CONTROLLER POINT NO. 9
EX-2	PULSE OUTPUT	MOTOR CONTROL 4	-
X0	INPUT	-	HEAD-3 CYCLE (Y14) OF SSPLC-V4
X1	INPUT	-	-
X2	INPUT	-	-
X3	INPUT	-	-
X4	INPUT	-	HEAD-4 CYCLE (Y15) OF SSPLC-V4
X5	INPUT	-	-
X6	INPUT	-	-
X7	INPUT	-	-
485-B	HMI COMM.	RS-485 B (WHITE)	CONNECT FROM HMI'S 2-CORE SHIELDED RS-485 COMMUNICATION CABLE
485-A	HMI COMM.	RS-485 A (BROWN)	
SH	-	-	SHIELD OF 2-CORE ANALOG OUTPUT CABLE
1A+	ANALOG O/P +	+VE OF 0-10V ANALOG O/P	RED WIRE OF 2-CORE SHIELDED CABLE. CONNECT TO POINT NO. 7 (10v) OF ANALOG INPUT OF VIBRATION CONTROLLER-3
1A-	ANALOG O/P -	-VE OF 0-10V ANALOG O/P	BLACK WIRE OF 2-CORE SHIELDED CABLE. CONNECT TO POINT NO. 6 (0V) OF ANALOG INPUT OF THE VIBRATION CONTROLLER-3
SH	-	-	SHIELD OF 2-CORE ANALOG OUTPUT CABLE
2A+	ANALOG O/P +	+VE OF 0-10V ANALOG O/P	RED WIRE OF 2-CORE SHIELDED CABLE. CONNECT TO POINT NO. 7 (10v) OF ANALOG INPUT OF VIBRATION CONTROLLER-4
2A-	ANALOG O/P -	-VE OF 0-10V ANALOG O/P	BLACK WIRE OF 2-CORE SHIELDED CABLE. CONNECT TO POINT NO. 6 (0V) OF ANALOG INPUT OF THE VIBRATION CONTROLLER-4

24V+	POWER INPUT	+VE OF 24VDC SMPS	+VE OF 24VDC SMPS
0V	POWER INPUT	0V OF SMPS	0V OF SMPS
LOADCELL 1	ANALOG I/P	LOADCELL INTERFACE	CONNECT THE LOADCELL CABLE OF HEAD 1
LOADCELL 2	ANALOG I/P	LOADCELL INTERFACE	CONNECT THE LOADCELL CABLE OF HEAD 2

VIBRATION CONTROLLER WIRING DIAGRAM:

NUMBER	NAME	CONNECTION
1	L~	230VAC PHASE
2	N~	230VAC NEUTRAL
3	N~	FEEDER NEUTRAL
4	O/P~	FEEDER PHASE
5	X	NO CONNECTION
6	0V	A- OF ANALOG OUTPUT OF WEIGHING CONTROLLER
7	10V	A+ OF ANALOG OUTPUT OF WEIGHING CONTROLLER
8	0V	0V OF SMPS
9	24V	VC POINT OF WEIGHING CONTROLLER

SAFETY:

1. Do not connect any output directly to load. Use the relay/SSR.
Connect the output wires to the input of the relay/SSR.
Connect the load between the N/O and common terminals of the relays/SSR.
2. Connect 24vdc power to the HMI by using the green connector supplied along with the HMI.
3. Use AC Line Filter while giving power to the panel in which this controller is installed.
4. Connect proper earthing wherever mentioned and make sure the earthing is correct.