

VFD PANEL BOXES

Features:

- Fully connectorized = no field wiring required.
- Switches wired directly to drive for best repeatability.
- Sealed panel with no fans or filters.
- Basic Program installed in drive.

Installed program conventions:

- Forward is away from motor.
- All prox cables must be active to run shuttle.
- Use extreme caution and slow speed when using laptop controlled jog mode. The switches will be disabled and over-travel crash is possible.

ETHERNET SAFETY PLC PANEL BOXES NOTE: WILL ONLY FUNCTION WITH ETHERNET SAFETY PLC		
<i>Part number</i>	<i>Application</i>	<i>Price</i>
S02102 FCA PPSL# SO2102-WELKER-PF525-SINGLE-1HP 150629	Single axis 1HP	\$7800
S02103 FCA PPSL#SO2103-WELKER-PF525-DBL 1HP 150625	Double axis 1HP	\$9900
S02104 FCA PPSL#SO2104-WELKER-PF525-SINGLE-3HP 150629	Single axis 3HP	\$8050
S02105 FCA PPSL#SO2105-WELKER-PF525-DBL-3HP 150625	Double axis 3HP	\$10,375
S02242	Single axis 5HP	\$8,600

ETHERNET STANDARD PLC PANEL BOXES		
Safety inputs, outputs and other safety hardware are not included. The VFD has built-in Safe-Torque-Off inputs that are ready for connection to external safety relays and other components that can be wired to this panel or added to this panel to achieve a desired Safety Category.		
<i>Part number</i>	<i>Application</i>	<i>Price</i>
S02165	Single axis 1HP	\$6200
S02166	Double axis 1HP	\$7875
S02167	Single axis 3HP	\$6450
S02168	Double axis 3HP	\$8300
S02243	Single axis 5HP	\$6950

Box Components	ETHERNET SAFETY PLC PANEL BOXES		ETHERNET STANDARD PLC PANEL BOXES	
	S02102 S02104 S02242	S02103 S02105	S02165 S02167 S02243	S02166 S02168
Enclosure, 20x32x10, w/ galvanized subplate	X	X	X	X
Circuit breaker, 3-pole, 30amp	X	X	X	X
Rotary handle, yellow/red, 12" rod, CB mechanism	X	X	X	X
Motor protector, 3-pole	X	X	X	X
Circuit breakers, 2-pole, 3amp (brake)	X	X	X	X
Powerflex 525 VFDs, 480VAC (no EMC filter) w/extended temp range piggy-back fan	X	X	X	X
Contactors, 3-pole, 24VDC for VFD motor output	X	X		
Contactors, 3-pole, 24VDC for brake	X	X	X	X
Safety relays, 24VDC 2DPDT (interposing between VFD & input relays)	X	X		
Relays, 24VDC, 2NO/2NC (steering contacts for VFD inputs)	X	X	X	X
Power supply, 24VDC 5amp out, 480VAC-2ph in	X	X	X	X
Ethernet switch, 5-port, unmanaged	X	X	X	X
Point I/O ethernet adapter. dual port	X	X		
1 point I/O safety input module - 8pt	X	X		
2 point I/O safety output modules - 8pt	X	X		
Point I/O terminal bases	X	X		
Terminals	X	X	X	X
(12) M12 4-pin receptacles for slide prox sensors	X	X	X	X
M35, 3-phase power male receptacle for incoming 480VAC	X	X	X	X
M35, 3-phase power female receptacles for outgoing power to motors	X	X	X	X
4-pin mini female receptacles, 16AWG, 1/2"-14 NPT for brake on motors	X	X	X	X
3-pin mini, female receptacles, 16AWG, 1/2"-14 NPT for dyn. brake option	X	X	X	X

Supplied Cables*

Motor Brake Cable: 4-pin Mini DE Patchcord, 30ft	1	2	1	2
Motor Power Cable: 4-pin M35 DE Patchcord, 8m	1	2	1	2
Motor Brake Receptacle: 4-pin Mini Male Receptacle (in motor CB)	1	2	1	2
Motor Power Receptacle: 4-pin M35 Male Receptacle (in motor CB)	1	2	1	2
Inductive Prox Sensor Cable: 4-pin DC Micro M12 DE patch cord, 5M	6	12	6	12

*Prox cables can be extended with 4-pin M-12 in field to suit

ELECTRICAL PANEL FEATURES

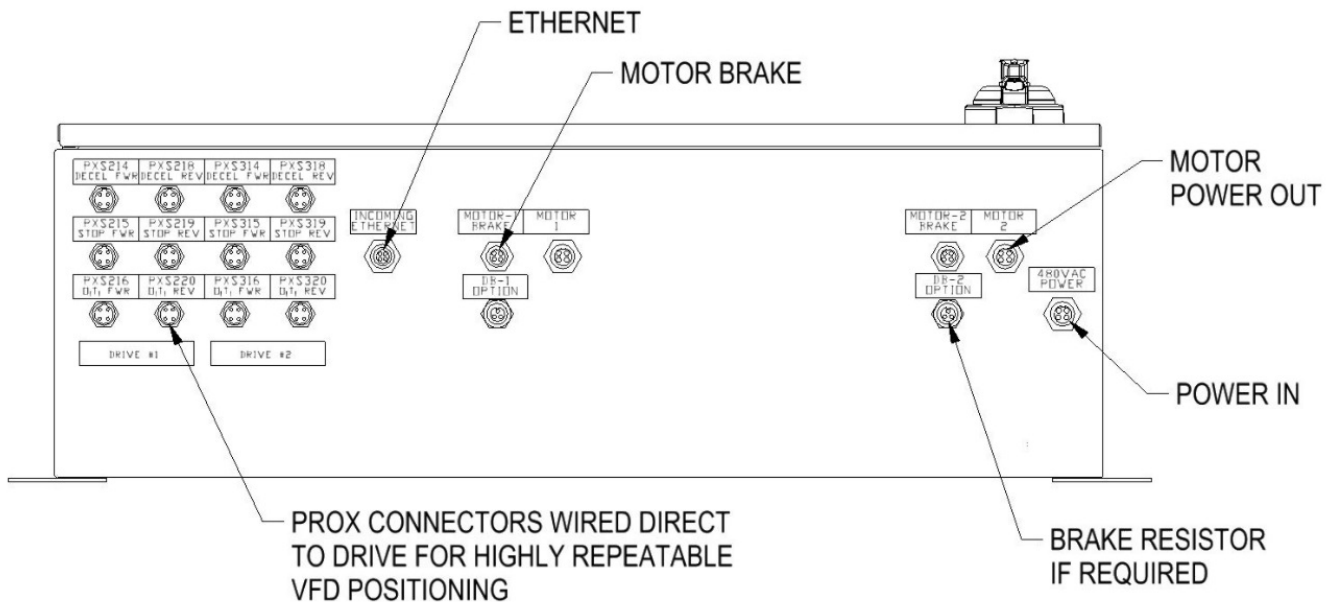
WELKER VFD PANEL

SINGLE OR DOUBLE DRIVE
 REPEATABLE POSITIONING USING VFD
 NO FANS OR FILTERS, BETTER FOR WELD ENVIRONMENT
 COMES WITH PRE-INSTALLED STARTER PROGRAM
 WORKS WITH BELT AND SCREW CONFIGURATIONS
 SAFETY FEATURES AVAILABLE
 ALLEN BRADLEY 525 DRIVES

100% CONNECTORIZED

ETHERNET TO PLC
 ALL SWITCHES WIRED DIRECT TO DRIVE UP REPEATABILITY
 INCOMING POWER
 OUTGOING MOTOR POWER
 SWITCH INPUTS
 BRAKE RESISTOR IF REQUIRED
 MOTOR BRAKE

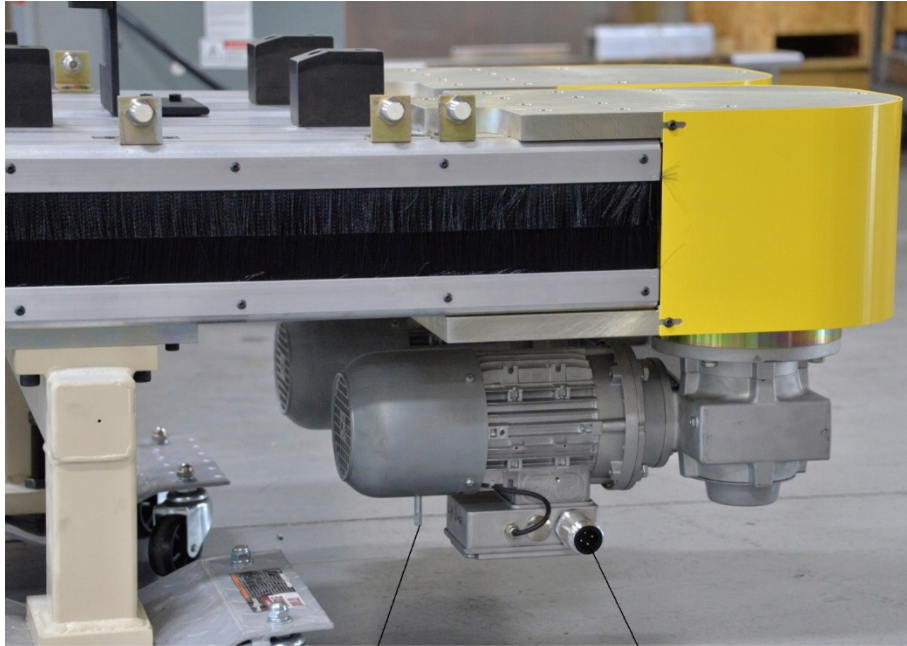
TYPICAL PANEL LAYOUT:



TYPICAL PANEL BOX:



SOME FEATURES PROVIDED IN COMPLETE PLUG & PLAY SYSTEMS FROM WELKER:



MANUAL BRAKE RELEASE

CONNECTORIZED
MOTOR POWER

CONNECTORIZED BRAKE
CONTROL CABLE



TYPICAL CONTROLS & PALLET SENSORS:

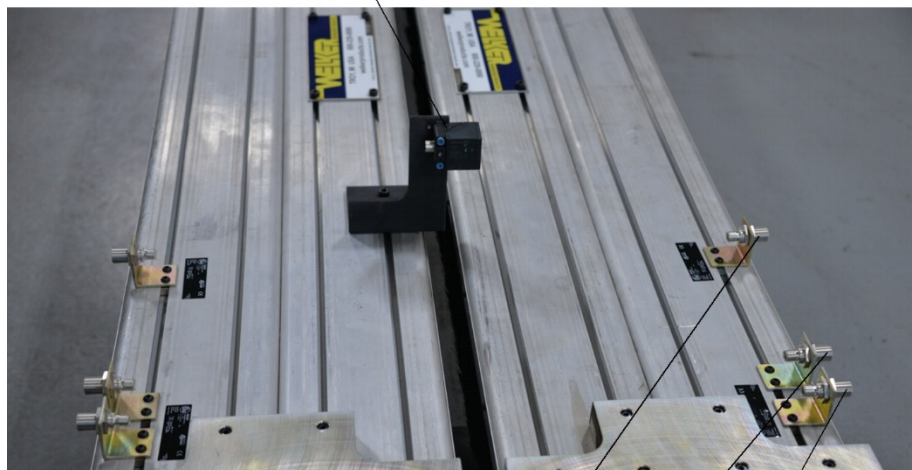
EXAMPLE PART NEST TOOLING
(SUPPLIED BY CUSTOMER)



WIRELESS PART PRESENT SWITCHES

WIRELESS POWER AND COMMUNICATION BLOCK (BY CUSTOMER)

CUSTOMER PROVIDED WIRELESS
POWER AND COMMUNICATION
BLOCK TRANSMITTER



DECEL

IN-POSITION STOP

OVER TRAVEL