

TECHNICAL BULLETIN 1

Estop Safety Relay Replacements

Issued by: John Robinson
 Date: 29/02/16
 Revision: A (Update for MSR127R).
 - (3/10/2000 – 1st release – Preventa XPS-AL5110 to MSR6R/T)
 Applies to: Various
 Used on: Various
 Distribution: Service Engineers

1 Introduction

This bulletin provides details for replacing obsolete Safety Relay Modules with the latest, preferred model.

Preferred replacement is:

- Allen-Bradley, MSR127R
- XYZ Pn: 12628

(Note MSR127RP is identical except for removable terminals).

LED Indicators:

PWR: Lit green when unit is powered.
 Flashes Green if there is a fault in the E-stop button wiring.
 CH1: Lit green when o/p channel 1 is closed.
 CH2: Lit green when o/p channel 2 is closed.

Both CH1 and CH2 should be unlit when the unit is first powered up, or the E-stop button is pressed.

Both CH1 and CH2 should be lit after the unit is reset.



2 Replacing Allen-Bradley, Guardmaster MSR6R/T

- Used on: Most ProtoTrak and King Rich Manual machines, pre March 2016
- XYZ Part Number: 3157

Transfer wiring as per the table below:

MSR6R/T Terminals	MSR127R Terminals	Notes
A1	A1	24VAC
A2	A2	0V
S13	S12	ESTOP SW2
S14	S11	
N/A	Link S52-S11	
S23	S21	ESTOP SW3
S24	S22	
X1	S12	RESET
X2	S34	
13	13	Safety O/p 1
14	14	
23	23	Safety O/p 2
24	24	
33	33	Safety O/p 3
34	34	
41	41	No Connection (Auxiliary, NC o/p)
42	42	

3 Replacing 24VAC/DC PILZ PNOZ X2 and X3

- Used on: Various PT 3 machines
- XYZ Part Number: 1733 (X2 model)

NOTE: THIS APPLIES TO THE 24V VERSION ONLY (110VAC version is PNOZ 16s, XYZ PN 1734)

Transfer wiring as per the table below:

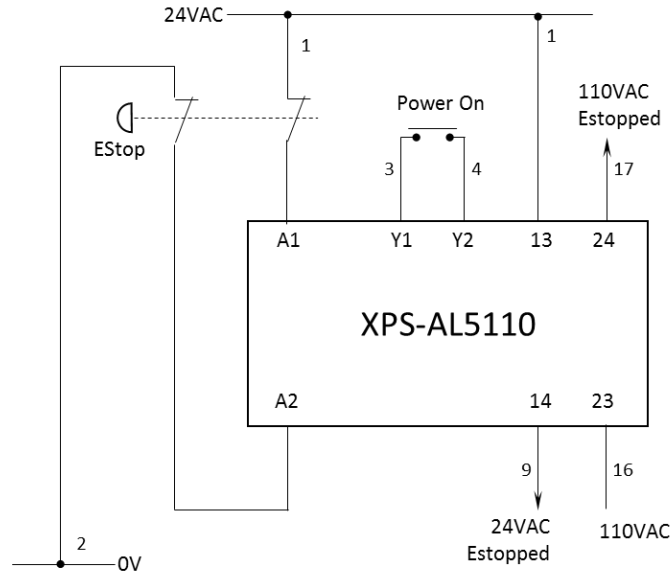
PNOZ X2	PNO X3	MSR127R Terminals	Notes
A1		A1	24VAC
A2		A2	0V
S11	S31	S11	ESTOP SW2
S12	S32	S12	
N/A		Link S52-S11	
S21		S21	ESTOP SW3
S22		S22	
S33		S12	RESET
S34		S34	
13		13	Safety O/p 1
14		14	
23		23	Safety O/p 2
24		24	
N/A	33	33	Safety O/p 3
N/A	34	34	
N/A	41	41	Used on PRO 360 (Inverter S3 input)
N/A	42	42	

4 Replacing Telemecanique/Schneider Preventa XPS-AL5110

- Used on: XYZ1500 (pre approx. yr2000)
- XYZ Part Number: 6315

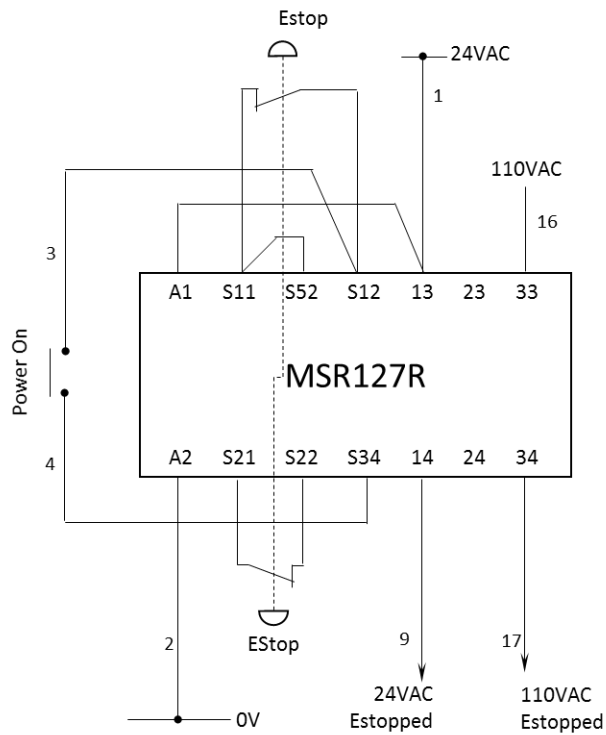
Note: Many of these machines may have already had the XPS-AL5110 relay replaced with the Guardmaster MSR6R/T. If so, see section 2 for details of replacement.

4.1 Original Wiring:



4.2 New Wiring:

- **Relay:**



• **E-Stop Switch:**



4.3 Wiring List:

1. Safety Relay Wiring:

Original Wire No	XPS-AL5110 Terminal	MSR127R Terminal	Notes
1	13	13 Link to A1	24VAC
9	14	14	24VAC Estopped
3	Y1	S12	Power On
4	Y2	S34	
16	23	33	110VAC
17	24	34	110VAC Estopped
N/A	N/A	Link S11 to S52	Unique to MSR127R
N/A	N/A	A2	New wire; connect to 0V

2. E-stop Switch Wiring

Original Wire No	Switch Panel	MSR127R Terminal	Notes
1	Estop switch 1, Terminal 2	No connection	Remove the two wires from the Estop switch, connect together and insulate.
2	Estop switch 2, Terminal 2	No connection	Remove any wires marked 2 from the E-stop switch, connect together and insulate.
BLACK	Estop switch 1, Terminal 1	S11	Estop SW1-1 (Was connected to XPS-AL, A1)
BLACK	Estop switch 2, Terminal 1	S21	Estop SW2-1 (Was connected to XPS AL, A2)
New wire	Estop switch 1, Terminal 2	S12	Estop SW1-2 (was connected to "1")
New wire	Estop switch 2, Terminal 2	S22	Estop SW2-2 (was connected to "2")