Series 745 FireLock[™] Fire-Pac for FireLock NXT[™] Valves





WARNING



- Read and understand all instructions before attempting to install any Victaulic products.
- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Wear safety glasses, hardhat, and foot protection.
 Failure to follow these instructions could result in death or serious personal injury and property damage.
- The Series 745 FireLock *Fire-Pac* for FireLock NXT™ Valves shall be used only in fire protection systems that are designed and installed in accordance with current, applicable National Fire Protection Association (NFPA 13, 13D, 13R, etc.) standards, or equivalent standards, and in accordance with applicable building and fire codes. These standards and codes contain important information regarding protection of systems from freezing temperatures, corrosion, mechanical damage, etc.
- These installation instructions are intended for an experienced, trained installer. The installer shall understand the use of this product and why it was specified for the particular application.
- The installer shall understand common industry safety standards and potential consequences of improper product installation. Failure to follow installation requirements and local and national codes and standards could compromise system integrity or cause system failure, resulting in death or serious personal injury and property damage.

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HAZARD IDENTIFICATION



Definitions for identifying the various hazard levels are provided below. When you see this symbol, be alert to the possibility of personal injury. Carefully read and fully understand the message that follows.

DANGER

 The use of the word "DANGER" identifies an immediate hazard with a likelihood of death or serious personal injury if instructions, including recommended precautions, are not followed.

WARNING

 The use of the word "WARNING" identifies the presence of hazards or unsafe practices that could result in death or serious personal injury if instructions, including recommended precautions, are not followed.

RECEIVING THE SHIPMENT

The Victaulic Series 745 FireLock *Fire-Pac* is specified, ordered, and built in accordance with the "Figure Number System" chart on the following page. Upon receipt of the *Fire-Pac* shipment, confirm that the cabinet is configured properly by referencing the original order, along with the figure number chart. **NOTE:** This figure number is stenciled on the plate located on the lower-left-hand corner of the cabinet door.

OUTSIDE FEATURES OF THE CABINET

The diaphragm pressure gauge, system air pressure gauge, water supply pressure gauge, and manual pull station are located on front of the cabinet for system operation monitoring.



To open the cabinet door, push the key hole/button to release the handle, then pull up and out on the handle. Keys are provided to lock the handle and the Fire Alarm Control Panel (FACP). These keys are shipped in the pocket on the right interior wall of the cabinet, along with the applicable system literature.

MECHANICAL CONNECTIONS

Mechanical connections include the water supply's inlet, the system's outlet, and the drain connection. For proper coupling installation, refer to the Victaulic I-100 Field Installation Handbook, which can be downloaded at victaulic.com. Internal connections to the valve are made with FireLock grooved pipe couplings and fittings.

- a.) Standard grooved connections for the water supply can be made from either side of the cabinet.
- b.) For *Fire-Pac* cabinets containing $1\frac{1}{2}$ 2-inch/48.3 60.3-mm valve sizes, the drain connections are $\frac{3}{4}$ -inch threaded. Drain connections can be made from either side of the cabinet.
- c.) For *Fire-Pac* cabinets containing $2\frac{1}{2} 8$ -inch/73.0 219.1-mm valve sizes, the drain connections are standard grooved. Drain connections can be made from either side of the cabinet.
- d.) A length of grooved-end pipe is accessible from the top of the cabinet for connection from the riser out to the system.

INSPECTION AND MAINTENANCE

The panels on the sides and back of the cabinet can be removed for ease of access to all trim components. For required inspection procedures, refer to the installation, maintenance, and testing manual for the trim configuration.



Bleed the valve, located at the bottom of the air tank, once every three months to remove any moisture from the line.

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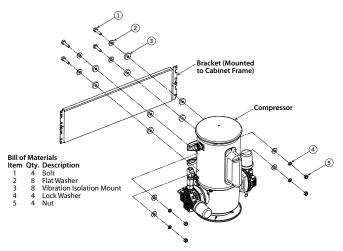
To perform maintenance on any internal valve components, refer to the installation, maintenance, and testing manual for the applicable trim configuration.

REMOVING THE COMPRESSOR FOR MAINTENANCE PURPOSES

WARNING

- Always turn off and lock out the circuit breaker before attempting to remove the compressor for maintenance.
- Depressurize and drain the piping system before attempting to perform any maintenance on the system.
- Any activities that require taking the valve out of service may eliminate the fire protection provided.
- Before servicing the system, notify the authority having jurisdiction.
- Consideration of a fire patrol should be given in the affected areas

Failure to follow these instructions could result in death or serious personal injury and property damage.



Perform the following steps to remove the compressor from the cabinet:

- 1. Turn off and lock out the circuit breaker.
- 2. Unplug the compressor's electrical cord (located on the plate above the compressor).
- 3. Disconnect the flexible hose at the compressor.
- 4. Loosen and remove the four nuts from the compressor.
- 5. Remove the four bolts/washers, the eight vibration isolation mounts, and the compressor from the mounting plate.
- Replace the compressor by re-installing the hardware, as shown in the drawing above.
- Plug the compressor's electrical cord back into the plate above the compressor.
- 8. Unlock and turn on the circuit breaker.

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Class Type	Size	Style Number	Trim Selection 8	Panel Design	Applicable Wiring Code	Compressor Selection	Air Maintenance Selection	Cabinet Options/ Color Selector
S A - Dry D - Deluge P - Preaction W - Wet	014 11%** 020 2" 030 3" 030 3" 040 8" 3 10 060 6" 080 8" 3 10	745	01 - Dry Actuated 12 - Dry Actuated 13 - Dry Actuated 14 - Dry Actuated 15 - Dry Actuated with Added Control Valve 16 - Dry Actuated Accelerated with Added Control Valve 17 - Dry Actuated Accelerated with Added Control Valve 18 - Deluge Pheumatic Pilot Line with Added Control Valve 18 - Deluge Pheumatic Pilot Line with Added Control Valve 19 - Deluge Pheumatic Pilot Line with Added Control Valve 19 - Deluge Pheumatic Pilot Line with Added Control Valve 19 - Deluge Pheumatic Pilot Line with Added Control Valve 10 - Deluge Electric with Added Control Valve 10 - Preaction Single-Interlocked Electric with Added Control Valve 11 - Preaction AutoConvert Single-Interlocked Electric with Panel Cross Zone with Added Control Valve 12 - Preaction Duble-Interlocked Electric with Panel Cross Zone with Added Control Valve 13 - Preaction Duble-Interlocked Electric Pheumatic/Electric with Panel Cross Zone with Added Control Valve 14 - Preaction Duble-Interlocked Pheumatic/Electric with Added Control Valve 16 - Preaction Duble-Interlocked Electric-Pheumatic/Electric with Added Control Valve 17 - Preaction Duble-Interlocked Electric-Pheumatic/Electric with Added Control Valve 18 - Preaction AutoConvert Double-Interlocked Pheumatic/Electric with Added Control Valve 17 - Preaction AutoConvert Double-Interlocked Electric-Pheumatic/Electric with Added Control Valve 18 - Preaction AutoConvert Double-Interlocked Pheumatic/Electric with Added Control Valve 19 - Preaction Double-Interlocked Pheumatic/Pheumatic With Added Control Valve 19 - Preaction Double-Interlocked Pheumatic/Pheumatic With Added Control Valve 19 - Preaction Double-Interlocked Pheumatic/Pheumatic With Added Control Valve 19 - Preaction Double-Interlocked Pheumatic/Pheumatic With Added Control Valve 19 - Preaction Double-Interlocked Pheumatic/	A - No Panel B - RP-2001/MRP-2001 Panel Indicudes Yun 12W, 12M Bateries) C - RP-2001/MRP-2001 Panel/4XTM D - RP-2001/MRP-2001 Panel/4XTM/ANNN-80 F - RP-2001/MRP-2001 Panel/4XTM/ANNN-RLV G - RP-2001/MRP-2001 Panel/4XTM/ANNN-RLV G - RP-2001/MRP-2001 Panel/4XTM/ANNN-RN/ ANN-RLV 1 - RP-2001/MRP-2001 Panel/ANN-80/ANN-I/O ANN-RLV 1 - RP-2001/MRP-2001 Panel/ANN-80/ANN-I/O ANN-RLV O - RP-2001/MRP-2001 Panel/ANN-RO/ANN-I/O C - RP-2001/MRP-2001 Panel/ANN-RN/ C - RP-2001/MRP-2001 Panel/ANN-RN/ C - RP-2001/MRP-2001 Panel/ANN-RN/ O - RP-2001/MRP-20	1 - Std. (US) UL Class B 2 - Canada ULC Class B 3 - US 220V 60 Hz Class B 4 - Standard Class A 5 - Canadian Class A 6 - 220V 60 Hz Class B 7 - 220V 50 Hz Class B 8 - 220V 50 Hz Class B 8 - 220V 50 Hz Class B 8 - 220V 50 Hz Class B 9 - Addressable Style A Wiring P - Addressable Style 7 Wiring P - 220V 50 Hz Class B New Zealand - Monitor Control Valves when Open as Signalled 13 Open as Signalled 13	B - % hp C - % hp P - % hp F - % hp F - % hp G - Inp^44 G - Inp^44 G - Inp^44 G - Inp^44 Hour Meter L - % hp with Hour Meter M - % hp with Hour Meter M - % hp with Hour Meter O - % hp with Hour Me	1 - 8ase Mounted Air Compressor 5 2 - Regulated Air Maintenance Trim Assembly Without Compressor 6 3 - Regulated Air Maintenance Trim Assembly with Jank and Compressor 4 - No Compressor or Regulated Air Maintenance Trim Assembly W - Nirogen Regulated rand AMD Kit for Compressor or Regulated Air Maintenance Trim Assembly with Tank and Compressor and Optional On/Off Switch 6 - Air Dryer/Filter with Regulated Air Maintenance Trim Assembly with Tank Maintenance Trim Assembly with Tank Compressor and Optional On/Off Switch 6 - Air Dryer/Filter with Regulated Air Maintenance Trim Assembly with Tank Maintenance Trim Assembly with Tank With Tank and Compressor with On/Off Switch 6 - Special 1 - Special 2 - Special 3 - Specia	1 - Red, Pipe Feed and Daain Right 2 - Weatherproof, Pipe 3 - Weatherproof, Pipe Feed and Danin Left 4 - Weatherproof, Pipe Feed and Danin Bottom 5 - Pipe Feed and Drain Bottom 6 - Pipe Feed and Drain 7 - Red, Pipe Feed and Drain 8 - Insulated and Heated, 9 - Insulated and Heated, 9 - Weatherproof, Pipe Feed and Drain Left? 9 - NFPA 72 Bypass Test 7 - Insulated and Heated, 9 - Special - Any Other Color and/or Special Options 1 9 - Special - Any Other Color and/or Special Options 1

10 These Fire-Pac options do not carry a UL Listing/FIM Approval as an assembly; components are UL Listed/FIM approved and installed as per the manufacturer's

recommendations. All sizes of addressable panel options require the larger cabinet due to panel size not fitting in smaller cabinet.

The RP-2001/MRP-2001 Panel option is strongly recommended for any AutoConvert trim configurations.

 12 Available in 3 - 8-inch/88.9 - 219.1-mm sizes only.

¹³ Not available in the US or Canada.

1 HP compressor options shall require an Air Maintenance Device.

Regulated Air Maintenance Trim Assembly with a compressor is for use with an external air source from a shop-air system, tank-mounted air compressor,

 4 Applies to Fire-Pac cabinets containing 2½ – 8-inch/73.0 – 219.1-mm valve sizes only 5 WARNING: Valves equipped with an accelerator require Air Maintenance Selection #2 or #3

Requires a Regulated Air Maintenance Trim Assembly (Option 3) with a tank

Bectric Release with panel cross-zoned

Nitrogen Regeneration System with Tank, or a tank supplied gas source regulated to under 125 psi/8.6 Bar.

(signal when nitrogen tank cannot maintain 100-psi/6.9-Bar inlet pressure to AMD). NOTE: The nitrogen cylinder is not provided with the nitrogen fill kit. 8-inch/219.1-mm valve trim may be re-piped from standard takeouts to accommodate cabinet fitting and chosen options. Follow flowpaths for setup. option N requires Option H for Compressor Selection. Option N has nitrogen pressure switch to augment in series the low air pressure switch

All insulated and heated options to have low temperature alarms wired into panel or as auxiliary contact.

¹⁵ Utilizes the Victaulic Series 798 Pneumatic actuator for use with a dry pilot line.

16 Utilizes Victaulic High Pressure Solenoid and second air pressure switch wired for fire alarm. Second Pressure switch activation at 7psi.

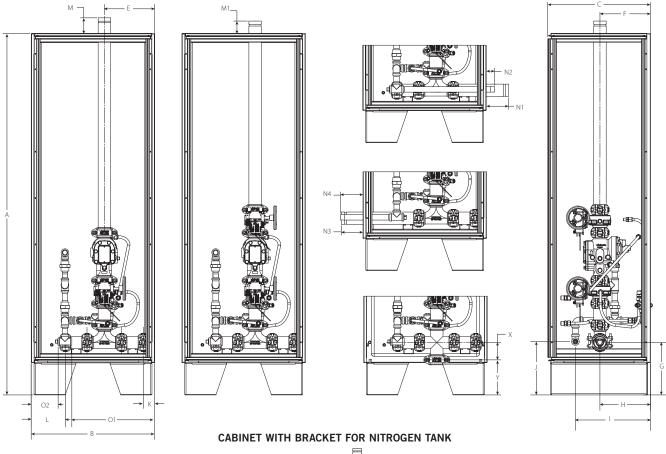
" Utilizes Victaulic Series 707 Electric Pneumatic actuator.

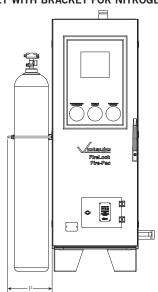
19 Utilizes Victaulic Series 776 Low-pressure actuator and the High-pressure solenoid piped in parallel in the trim.

19 When a 746LPA accelerator is required to meet trip times, option #3 on the air maintenance selection is required.

20 Installations for ½ hp compressors can only be configured as base mounted or with a switch; air maintenance trims with tank options are not available.

DIMENSIONS FOR FIRELOCK FIRE-PAC CABINETS CONTAINING $1\frac{1}{2}$ - 2-INCH/48.3 - 60.3-MM VALVE SIZES





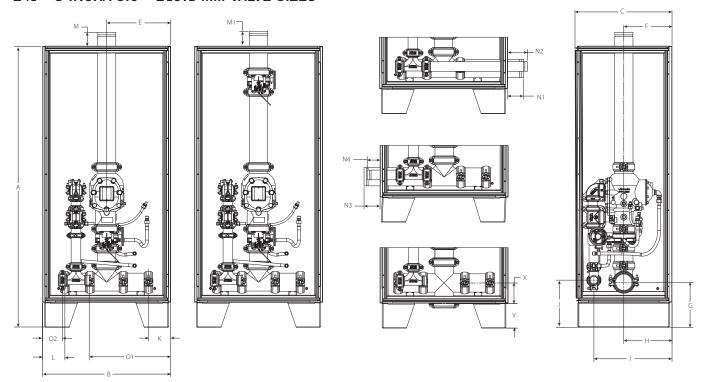
											D	imension	s – inche	es/mm											
Nom. Valve												Ri	/I ser nly		11 Added I Valve										Approx.
Size inches	Α	В	С	E	F	G	н	ı	J	K	L	Tee Supply	Cross Supply	Tee Supply	Cross Supply	N1	N2	N3	N4	01	02	P^	Х	Υ	Approx. Weight Each Ibs/kg‡
1 ½	69.1 1755	23.6 599	19.9 505	9.6 244	9.7 246	9.8 249	9.7 246	14.4 366	10.4 264	2.7 69	7.1 180	4.5 114	4.5 114	4.5 114	4.5 114	4.2 107	3.6 91	4.4 112	4.3 109	13.8 351	7.2 183	12.1 307	2.8 71	7.0 178	430.0 195
2	69.1 1755	23.6 599	19.9 505	9.6 244	9.7 246	10.0 254	9.7 246	14.4 366	10.2 259	2.2 56	6.5 165	2.9 74	2.9 74	2.3 58	2.3 58	4.3 109	1.6 41	4.1 104	4.3 109	15.9 404	5.1 130	12.1 307	3.3 84	6.7 170	470.0 213

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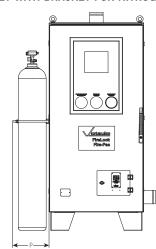
[^] Dimension P applies only to the cabinet with nitrogen bracket option
‡ Approximate weight applies only to Fire-Pac cabinets that do not contain the nitrogen option.
Dimensions may vary due to tolerances during manufacturing and assembly.

NOTE: The nitrogen cylinder is not provided with the nitrogen fill kit.

DIMENSIONS FOR FIRELOCK FIRE-PAC CABINETS CONTAINING $2\frac{1}{2}$ - 8-INCH/73.0 - 219.1-MM VALVE SIZES



CABINET WITH BRACKET FOR NITROGEN TANK



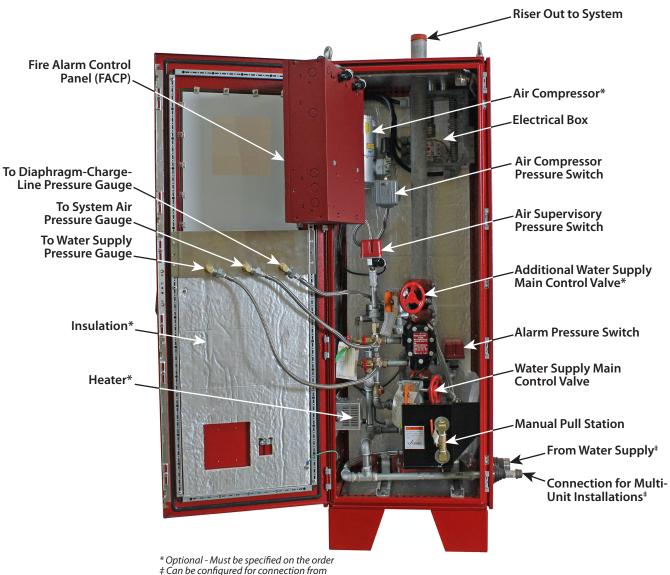
	Dimensions – inches/mm																								
Nom. Valve Size												Ri	VI ser nly	With	11 Added of Valve										Approx. Weight
inches or mm	Α	В	С	E	F	G	н	ı	J	к	L	Tee Supply	Cross Supply	Tee Supply	Cross Supply	N1	N2	N3	N4	01	02	P^	Х	Υ	Each lbs/kg‡
2 1/2	69.1	31.5	23.8	15.8	11.8	10.3	11.8	19.2	12.6	4.6	4.6	3.1	3.8	3.1	3.9	3.9	4.4	3.9	3.8	19.2	6.7	12.1	3.8	6.5	516.0
	1755	800	605	401	300	262	300	488	320	117	117	79	97	79	99	99	112	99	97	488	170	307	97	165	234
3	69.1	31.5	23.8	15.8	11.8	10.6	11.8	19.2	12.8	5.2	5.2	3.8	4.6	3.8	4.7	4.0	4.4	4.0	3.8	19.2	6.7	12.1	4.3	6.3	522.0
	1755	800	605	401	300	269	300	488	325	132	132	97	117	97	119	102	112	102	97	488	170	307	109	160	237
4	69.1	31.5	23.8	15.8	11.8	11.1	11.8	19.2	11.6	5.5	5.5	3.4	4.4	3.6	4.6	3.9	4.9	3.9	3.2	20.0	4.9	12.1	5.1	6.0	600.0
	1755	800	605	401	300	282	300	488	295	140	140	86	112	91	117	99	124	99	81	508	124	307	130	152	272
165.1	69.1	31.5	23.8	15.8	11.8	12.1	11.8	19.2	12.4	4.0	4.0	4.9	5.9	4.7	5.7	5.7	6.2	5.7	5.1	19.9	5.0	12.1	6.6	5.5	660.0
mm	1755	800	605	401	300	307	300	488	315	102	102	124	150	119	145	145	157	145	130	505	127	307	168	140	299
6	69.1	31.5	23.8	15.8	11.8	12.2	11.8	19.2	12.5	4.0	4.1	6.3	7.3	6.6	7.6	5.7	5.7	5.7	5.6	20.4	4.5	12.1	6.6	5.6	660.0
	1755	800	605	401	300	310	300	488	318	102	104	160	185	168	193	145	145	145	142	518	114	307	168	142	299
8	69.1	31.5	23.8	15.5	11.8	13.2	11.8	19.2	12.5	2.5	2.5	4.6	5.4	4.7	5.5	5.6	4.9	5.6	4.7	21.3	3.7	12.1	7.9	5.3	940.0
	1755	800	605	394	300	335	300	488	318	64	64	117	137	119	140	142	124	142	119	541	94	307	201	135	426

[^] Dimension P applies only to the cabinet with nitrogen bracket option
‡ Approximate weight applies only to Fire-Pac cabinets that do not contain the nitrogen option.
Dimensions may vary due to tolerances during manufacturing and assembly.

NOTE: The nitrogen cylinder is not provided with the nitrogen fill kit.

INTERNAL VIEW - FIRE-PAC CABINET CONTAINING 1½ - 2-INCH/48.3 - 60.3-MM VALVE SIZES

Below is a typical 2-inch/60.3-mm Series 768 FireLock NXT™ Dry Valve. Options are shown, such as a heater and insulation.

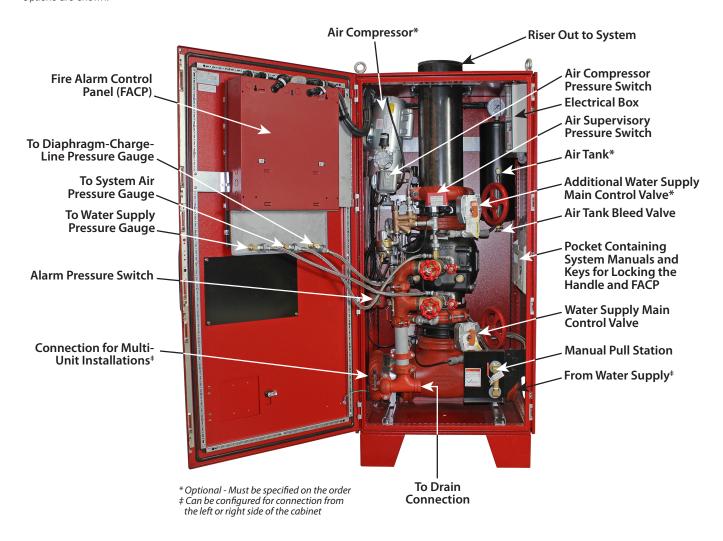


^{*} Optional - Must be specified on the order ‡ Can be configured for connection from the left or right side of the cabinet NOTE: FACP is typically latched onto the frame (shown unlatched in the above photo)

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INTERNAL VIEW - FIRE-PAC CABINET CONTAINING 2½ - 8-INCH/73.0 - 219.1-MM VALVE SIZES

Below is a typical 8-inch/219.1-mm Series 769 FireLock NXTTM Preaction Actuated Valve with Double-Interlocked, Electric/Pneumatic release trim. Options are shown.



FIRELOCK FIRE-PAC FIRE ALARM CONTROL PANEL (FACP) OPTIONS

Option#	Panel Design	Description
А	No Panel	This option includes a terminal block for wiring connections only.
В	NOTIFIER* RP-2001/FIRE-LITE* MRP-2001 Panel with Two 12-Volt, 12AH Batteries	This option includes the base panel with two 12AH batteries. The base panel provides the alarm and trouble relays. The alarm indicates when the valve trips, and the trouble indicates a technical difficulty (i.e. loss of power, loose wire, etc.). Three programmable relay contacts are provided for remote signaling.
С	NOTIFIER* RP-2001/FIRE-LITE* MRP-2001 Panel with 4XTM	This option includes option "B," plus a supervised output for local energy municipal box transmitter and alarm and trouble reverse polarity.
D	NOTIFIER* RP-2001/FIRE-LITE* MRP-2001 Panel with 4XTM/N-ANN-80	This option includes option "C," plus a remote LCD annunciator that mimics the information displayed on the FACP LCD display.
E	NOTIFIER* RP-2001/FIRE-LITE* MRP-2001 Panel with 4XTM/N-ANN-I/O	This option includes option "C," plus an LED driver that can be used as an interface with the FACP to drive most customized graphic annunciators.
F	NOTIFIER* RP-2001/FIRE-LITE* MRP-2001 Panel with 4XTM/N-ANN-RLY	This option includes option "C," plus 10 additional, programmable Form-C relays.
G	NOTIFIER* RP-2001/FIRE-LITE* MRP-2001 Panel with 4XTM/N-ANN-80/ N-ANN-I/O	This option combines the features of option "D" and option "E".
Н	NOTIFIER* RP-2001/FIRE-LITE* MRP-2001 Panel with 4XTM/N-ANN-80/ N-ANN-RLY	This option combines the features of option "D" and option "F".
ı	NOTIFIER* RP-2001/FIRE-LITE* MRP-2001 Panel with 4XTM/N-ANN-I/O/N-ANN-RLY	This option combines the features of option "E" and option "F".
J	NOTIFIER* RP-2001/FIRE-LITE* MRP-2001 Panel with N-ANN-80	This option includes option "B," plus a remote LCD annunciator that mimics the information displayed on the FACP LCD display.
K	NOTIFIER* RP-2001/FIRE-LITE* MRP-2001 Panel with N-ANN-80/ N-ANN-I/O	This option includes option "B," plus a remote LCD annunciator that mimics the information displayed on the FACP LCD display and an LED driver that can be used as an interface with the FACP to drive most customized graphic annunciators.
L	NOTIFIER* RP-2001/FIRE-LITE* MRP-2001 Panel with N-ANN-80/ N-ANN-RLY	This option includes option "B," plus a remote LCD annunciator that mimics the information displayed on the FACP LCD display and 10 additional, programmable Form-C relays.
М	NOTIFIER* RP-2001/FIRE-LITE* MRP-2001 Panel with N-ANN-80/ N-ANN-I/O/N-ANN-RLY	This option includes option "K," plus 10 additional, programmable Form-C relays
N	NOTIFIER* RP-2001/FIRE-LITE* MRP-2001 Panel with N-ANN-I/O	This option includes option "B," plus an LED driver that can be used as an interface with the FACP to drive most customized graphic annunciators.
Р	NOTIFIER* RP-2001/FIRE-LITE* MRP-2001 Panel with N-ANN-RLY	This option includes option "B," plus 10 additional, programmable Form-C relays.
Q	NOTIFIER* RP-2001/FIRE-LITE* MRP-2001 Panel with N-ANN-I/ O/N-ANN-RLY	This option combines the features of option "N" and option "P".
R	NOTIFIER* NFS-320 with Addressable Panel	This option includes a NOTIFIER* NFS-320 addressable panel capable of networking with 318 intelligent devices through the NOTI-FIRE-NET protocol and contains two, 12AH batteries. All of the trouble and supervisory alarms are discretely wired and factory programmed to alert to specific issues with the Fire-Pac. Any applicable solenoid releases are factory wired for release. Commissioning and programming of this option shall be completed by a NOTIFIER* approved contractor. Contact Victaulic for additional information.
S	Secondary Addressable-Ready Unit (No Panel, NOTIFIER* XP10-M Ten-Input Monitor Module)	This option has all of the trouble and supervisory alarms discretely wired to a NOTIFIER* XP10-M board. It is ready to interface to a contractor-supplied NOTIFIER* NFS-320 or compatible addressable panel through its Signaling Line Circuit (SLC) loop. In addition, any applicable solenoid releases are factory wired for release. Commissioning and programming of this option shall be completed by a NOTIFIER* approved
		contractor. Contact Victaulic for additional information.

[#] This designation corresponds with the "Panel Design" section of the Figure Number System chart on page 3.
* NOTIFIER and FIRE-LITE are registered trademarks of Honeywell International Inc.

NOTE: The addressable options do not carry a UL Listing or FM Approval as an assembly. Individual components are UL Listed and/or FM Approved and shall be installed per the manufacturer's recommendations.

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FIRELOCK FIRE-PAC ELECTRICAL SCHEMATIC REFERENCE

The following table provides a breakdown of electrical schematics according to trim selection. The applicable schematic is provided in the cabinet.

	Trim Selection#	Electrical Schematic Reference Drawing
01	Dry Actuated	W-SCHEM-745-050
1A	Dry Actuated with Additional Water Supply Main Control Valve	W-SCHEM-745-050
02	Dry Actuated with Accelerator	W-SCHEM-745-050
2A	Dry Actuated with Accelerator and Additional Water Supply Main Control Valve	W-SCHEM-745-050
03	Deluge Pneumatic (Dry Pilot)	W-SCHEM-745-050
3A	Deluge Pneumatic (Dry Pilot) with Additional Water Supply Main Control Valve	W-SCHEM-745-050
04	Deluge Electric	W-SCHEM-745-000
4A	Deluge Electric with Additional Water Supply Main Control Valve	W-SCHEM-745-000
05	Preaction Single-Interlocked, Electric	W-SCHEM-745-020
5A	Preaction Single-Interlocked, Electric with Additional Water Supply Main Control Valve	W-SCHEM-745-020
5B	Preaction AutoConvert Single-Interlocked, Electric	W-SCHEM-745-060
5C	Preaction AutoConvert Single-Interlocked, Electric with Additional Water Supply Main Control Valve	W-SCHEM-745-060
06	Preaction Double-Interlocked, Electric	W-SCHEM-745-020
6A	Preaction Double-Interlocked, Electric with Additional Water Supply Main Control Valve	W-SCHEM-745-020
6B	Preaction AutoConvert Double-Interlocked, Electric	W-SCHEM-745-060
6C	Preaction AutoConvert Double-Interlocked, Electric with Additional Water Supply Main Control Valve	W-SCHEM-745-060
07	Preaction Double-Interlocked, Pneumatic/Electric	W-SCHEM-745-020
7A	Preaction Double-Interlocked, Pneumatic/Electric with Additional Water Supply Main Control Valve	W-SCHEM-745-020
7B	Preaction Double-Interlocked, Electric (Electric-Pneumatic/Electric)	W-SCHEM-745-040
7C	Preaction Double-Interlocked, Electric (Electric-Pneumatic/Electric) with Additional Water Supply Main Control Valve	W-SCHEM-745-040
7D	Preaction Single-Interlocked, Pneumatic	W-SCHEM-745-050
7E	Preaction Single-Interlocked, Pneumatic with Additional Water Supply Main Control Valve	W-SCHEM-745-050
7F	Preaction AutoConvert Double-Interlocked, Pneumatic/Electric	W-SCHEM-745-060
7G	Preaction AutoConvert Double-Interlocked, Pneumatic/Electric with Additional Water Supply Main Control Valve	W-SCHEM-745-060
7H	Preaction AutoConvert Double-Interlocked, Electric-Pneumatic/Electric	W-SCHEM-745-060
7J	Preaction AutoConvert Double-Interlocked, Electric-Pneumatic/Electric with Additional Water Supply Main Control Valve	W-SCHEM-745-060
08	Preaction, Double-Interlocked Pneumatic/Pneumatic	W-SCHEM-745-030
8A	Preaction, Double-Interlocked Pneumatic/Pneumatic with Additional Water Supply Main Control Valve	W-SCHEM-745-030
09	Special	-

 $[\]hbox{\# This designation corresponds with the ``Trim Selection'' section of the Figure Number System chart on page 3.}$

IMPORTANT FACP AND WIRING INFORMATION

The following table contains terminology that will be used throughout this section and descriptions for each item.

Item	Description
RP-2001 (120 Volt) RP-2001E (220 Volt) MRP-2001 (120 Volt) MRP-2001E (240 Volt)	Six zone, 24-volt deluge/preaction control panel for single and dual hazard applications
N-CAC-5X	Optional - Used to convert Class "B" style wiring connections to Class "A" style
4XTM	Optional - Used to provide a supervised output for local energy municipal box transmitter and alarm and trouble reverse polarity
N-ANN-80	Optional - Remote LCD annunciator that mimics the information displayed on the FACP LCD display
N-ANN-I/O	Optional - LED driver module provides a connection to a user-supplied graphic annunciator
N-ANN-RLY	Optional - Provides 10 programmable Form-C relays that can be programmed for various functions: alarm, trouble, supervisory, AC loss, waterflow delay, input zones, and silenceable alarm

- FACP Fire Alarm Control Panel
- LCD Liquid Crystal Display
- LED Light-Emitting Diode
- Class "B" Two-Wire Configuration
- Class "A" Four-Wire Configuration

DANGER



Only qualified electricians should connect incoming power to the *Fire-Pac*.

Failure to follow this instruction could result in death or serious personal injury.

- a.) An electrical box is provided for the installer to wire the supply power, initiating devices (such as pull stations and detectors), notification devices (such as horns and strobes), and other auxiliary connections. All installation wiring shall be performed only in the electrical box by utilizing the top unwired screw terminals. Fire alarm wiring shall be performed in accordance with NFPA 72, NFPA 70, and other local regulations.
- b.) For enclosures that contain circuit breakers, the breaker shall be used as supplemental branch protection. Primary protection shall be used when installing the *Fire-Pac*. Circuit breakers can be used as a disconnect switch to perform maintenance or replacement of a device. The operation of each circuit breaker is designed to report a breaker that has either tripped or has been operated manually (except for the enclosure light). For localities that will not allow supplemental overload protection on the primary fire alarm riser, the breakers can be bypassed. Contact Victaulic for additional information. When any maintenance or work is being performed, proper lockout/tagout procedures shall be followed.
- c.) For Fire-Pac cabinets that contain an FACP, two 12-amp/hour batteries are provided; these batteries are intended for general use and shall be connected and disconnected only with primary power supplied to the FACP. All battery calculations shall be generated in accordance with installation requirements. Supplied batteries shall not be used if the battery requirement calculations are greater than the capacity of the supplied batteries. Contact Victaulic for additional battery sizes. Batteries that are greater than 18-amp/hour shall be installed in a separate, approved enclosure.
- d.) Optional modules (4XTM, N-CAC-5X, etc.) can be configured into the *Fire-Pac* when an FACP is installed. The terminal blocks and wiring are the same; therefore, connections for optional modules may be available. DO NOT perform any function unless the specific module has been specified during the ordering process. **EXAMPLE:** Terminal block TBD has connections for alarm, trouble, and municipal box. If this option has not been ordered, the terminal will not have any function. If an optional device is needed at a later time, it can be retrofitted easily into the *Fire-Pac* using the pre-wired connections. Contact Victaulic for additional information.
- e.) For *Fire-Pac* cabinets without an FACP, two terminal blocks are provided for supply power, device supervision, and valve release. All supervisory connections are considered to be "dry" contacts. To use supervisory contacts for functions that require current to flow through the installed devices, refer to the corresponding device listing, along with the factory wire size. Terminal block functions and connections may vary between *Fire-Pac* styles and options.
- f.) For systems without an FACP and where a solenoid coil (Series 753-E Solenoid or Series 767 Electric/Pneumatic Actuator) is used to release or trip a valve, fire alarm panel compatibility shall be considered to prevent improper valve operation or damage to the FACP. Coordination shall be made between the authority having jurisdiction (AHJ), fire alarm panel installer, and the building owner to ensure all system devices meet the intent of the work to be performed. Contact Victaulic for an updated compatibility document.

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SUPPLY POWER

Fire-Pac cabinets, that are equipped with a factory-installed compressor or FACP, will have a designated terminal block (TB1) for the installer to connect 120 VAC. Refer to the current ratings in the tables below to ensure proper circuit protection is provided. The installer is responsible for supplying a dedicated fire alarm circuit with primary protection to the Fire-Pac that meets NFPA 72, NFPA 70, and other local regulations. Installed circuit breakers are for supplemental protection only.

Table 1 - Compressor Power

Compressor Size Hp	Kw Rating (115 VAC)	Supply Power VAC
1/6	0.12	110/120-60-1
1/4	0.19	110/120-60-1
1/2	0.37	110/120-60-1
3/4	0.56	115-60-1
1	0.74	115-60-1

Table 2 - FACP and Enclosure Light

Component	Current Draw	Rated Power
RP-2001/MRP-2001	3.66 Amps	120-60-1
Enclosure Light	.5 Amp	120-60-1

ELECTRICAL CONNECTIONS

REV_M

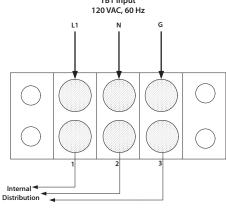
DANGER

 Always de-energize the primary electrical supply before attempting to make any connections.

Failure to follow this instruction could result in death or serious personal injury.

Before any connections are made in the Fire-Pac, the primary electrical supply shall be de-energized, and the proper lockout/tagout procedure shall be followed. All primary wiring and circuit breakers shall be sized properly for the application. Refer to Figure 1 and the following instructions.

Figure 1 - Supply Power Terminal Block TR1 Input



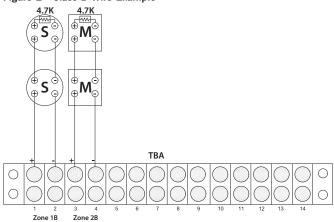
- 1. Minimum Wire: 14 AWG, 600 V
- 2. Max Load = 15.6 A with 1 Hp Compressor
- Connect the HOT or L1 input voltage wire to Terminal 1 of TB1. 1
- Connect the NEUTRAL or N wire to Terminal 2 of TB1. 2.
- 3. Connect the GROUND or G wire to Terminal 3 of TB1.
- Ensure proper torque is applied to terminal screws to secure wires. 4.
- Ensure all non-power-limited wires are at least 1/4 inch/6 mm from power limited wires.

INITIATING CIRCUITS

The Fire-Pac is equipped with two alarm initiating circuits that are supervised for an open, short, or grounded circuit. A 4.7 Kohm end-ofline resistor performs this function when installed on the last device of the circuit. Only devices that are listed within the supplied FACP manual shall be connected to these inputs. Maximum loop resistance is 100 ohms with a maximum of 25 detectors per initiating circuit.

Two Class B (2-wire) connections are standard with the Fire-Pac. "Zone 1B" and "Zone 2B" are designated as alarm initiating inputs on the Fire-Pac. Zone connections on terminal block TBA are broken down to two connections (positive and negative). These connection points are configured to initiate an alarm condition on the FACP when shorted or closed. "Zone 2B" on TBA performs the same function as "Zone 1A", although it is pre-programmed as a manual pull station input. Devices, including smoke and heat detectors, pull stations, or any other approved initiating device, would be connected to these inputs. Refer to Figure 2 and the following instructions.

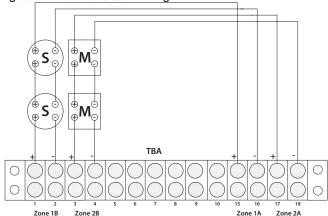
Figure 2 - Class B Wire Example



- Install and wire all field devices with a 4.7 Kohm resistor on the
- Before landing wires on the terminal block, check the circuit for 2. integrity (open, short, loop resistance, etc.).
- 3. Land wires to the appropriate connection point on TBA (+/-).
- Unused inputs shall be terminated with 4.7 Kohm resistors across
- If the optional N-CAC-5X module is installed, Class A wiring is b.) supported. To connect a Class A wired device, connections on "Zone 1B" and "Zone 1A" on terminal block TBA would be made. Refer to Figure 3 and the instructions on the following page. The same connections would apply to the second initiating input circuit; however, the connection would be made on "Zone 2B" and "Zone 2A". No end-of-line resistor is used on this class of wiring.

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Figure 3 - N-CAC-5X Class A Wiring

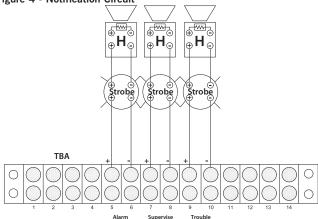


- Connect the positive terminal of Zone XB to the positive terminal of the device, then connect the positive terminal of Zone XA to the positive terminal of the device.
- Connect the negative terminal of Zone XB to the negative terminal of the device, then connect the negative terminal of Zone XA to the negative terminal of the device.
- 3. Before landing wires on the terminal block, check the circuit for integrity (open, short, loop resistance, etc.).
- 4. No 4.7 Kohm resistor is needed for Class A wiring.

NOTIFICATION CIRCUITS

Three supervised Class B notification devices can be connected to the *Fire-Pac*. Alarm, trouble, and supervisory conditions will report as separate signal on terminal block TBA. Each output can have a 3-amp maximum current draw, and at no time can the DC output exceed 7 amps. Refer to the FACP's Device Compatibility Appendix for listed devices that can be connected to these outputs. Refer to Figure 4 and the following instructions.

Figure 4 - Notification Circuit



- Install and wire the notification devices with properly-sized conductors
- 2. Place a 4.7 Kohm end-of-line resistor on the last device.
- 3. Before landing wires on the terminal block, check the circuit for integrity (open, short, loop resistance, etc.).
- 4. Unused outputs shall be terminated with 4.7 Kohm resistors.

AUXILIARY 24 VDC

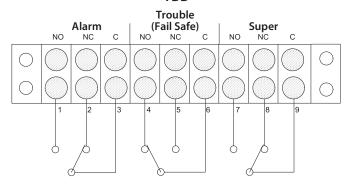
Terminal block TBB contains two separate 24-volt connections for four-wire smoke detectors or any other special application. The "RST24V" connection on TBB provides 500mA of resettable power to field devices (24-volt loss when rest is depressed on the FACP). The "RST24V" point provides a constant 500mA that can be configured as a resettable point by moving JP31 on the FACP. Refer to the FACP manual for details.

PROGRAMMABLE RELAYS

Terminal block TBC contains contacts for three Form-C relays that are factory programmed for alarm, supervisory, and trouble conditions. Refer to Figure 5 for details. Each relay is rated for 2 amps @ 30 VDC (resistive) and .5 amp @ 30 VAC (resistive). Relay function can be modified through the programming function of the FACP.

Figure 5 - Standard Relay Contacts

TBB



4XTM OPTION

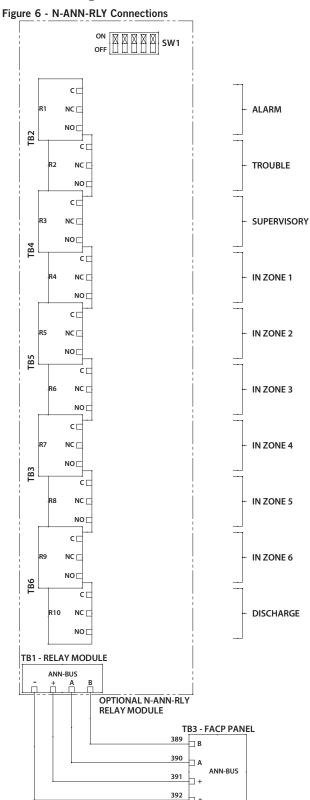
The 4XTM option provides a supervised output for a local municipal box transmitter in addition to alarm and trouble reverse polarity. The module is wired to terminal block TBD, which contains connections for remote alarm, remote trouble, and municipal box. All outputs are non-power-limited and can be disabled with a disconnect switch located on the 4XTM module.

<u>ictaulic</u>

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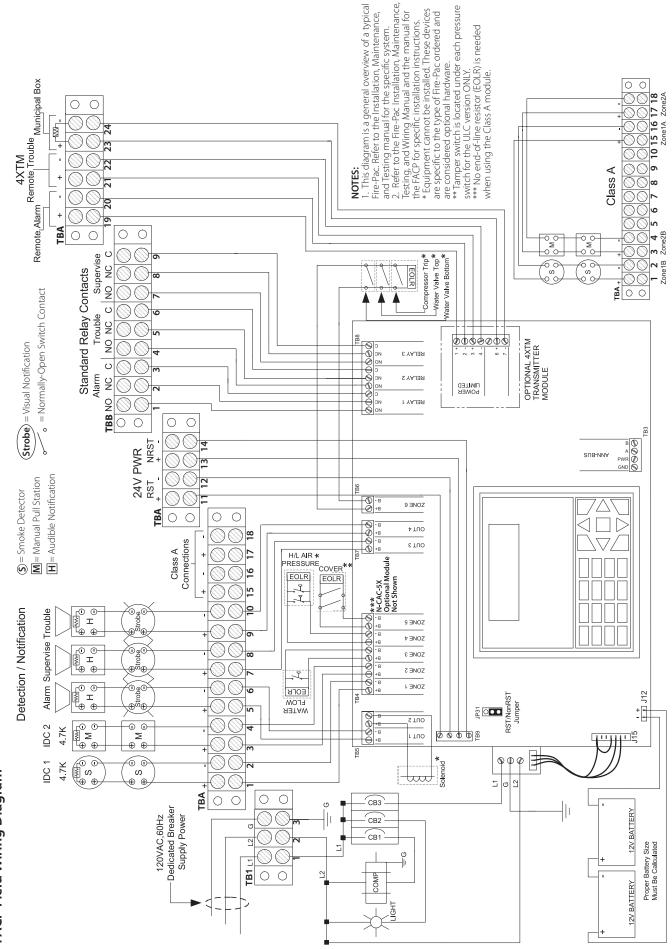
N-ANN-RLY OPTION

The N-ANN-RLY option provides 10 programmable Form C relay contacts rated at 2.0 amps @ 30 VDC (resistive) and .5 amp @ 30 VAC (resistive). This module is factory installed in the FACP, and connection is performed directly on the circuit board, in accordance with the FACP manual. Refer to Figure 6.



REV_M

FACP Field Wiring Diagram



FACP PROGRAMMING

- Programming Matrix for Drawing W-SCHEM-745-000 (Trim Selection 04)
- Programming Matrix for Drawing W-SCHEM-745-020 (Trim Selection 05, 06, 07)
- Programming Matrix for Drawing W-SCHEM-745-030 and W-SCHEM-745-050 (Trim Selection 08, 01, 02, 03, 7D)
- Programming Matrix for Drawing W-SCHEM-745-060 (Trim Selection 5B, 6B, 7F, 7H)





PROGRAMMING MATRIX FOR DRAWING W-SCHEM-745-000 (TRIM SELECTION 04)

SYSTEM SET UP - WHEN SCREEN READS "SYSTEM ALL NORMAL"

- 1) Select MODE
- 2) Select 2 = PROGRAMMING MODE
- 3) Enter user password 5 digits
- 4) Down Arrow, Select 3 = SYSTEM SETUP
- 5) Select 3 = BANNER
- 6) Select 2 = USER BANNER
- 7) Type "(5 spaces) FIRE-PAC" Select ENTER, ENTER
- 8) Return to SYSTEM SETUP Select ESC
- 9) Select 2 = TIMERS
- 10) Select 1 = SOAK 1
- 11) Select 1 = ALWAYS ON
- 12) Return to main programming menu Select ESC, ESC

OUTPUT CIRCUITS

- 1) Up Arrow, Select 3 = OUTPUT CIRCUITS
- 2) Select 1 = OUTPUT 1
- 3) Set to the following
 - 1 = ENABLED YES
 - 2 = TYPE ALARM NAC
- 4) Return to OUTPUT CIRCUITS Select ESC
- 5) Select 3 = OUTPUT 3
- 6) Set to the following
 - 1 = ENABLED YES
 - 2 = TYPE SUPV BELL NAC
- 7) Return to OUTPUT CIRCUITS Select ESC
- 8) Select 2 = OUTPUT 2
- 9) Set to the following
 - 1 = ENABLED YES
 - 2 = TYPE RELEASE CIR 1 UNSUPV SHORTS
- 10) Return to OUTPUT CIRCUITS Select ESC
- 11) Down Arrow, Select 1 = OUTPUT 4
- 12) Set to the following
 - 1 = ENABLED YES
 - 2 = TYPE TROUBLE BELL NAC
- 13) Return to main programming menu Select ESC, ESC

- 6) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE PULL STATION

Down Arrow

- 1 = OUTPUT CIRCUIT MAP
- 1 = ALARM NAC YES
- 2 = RELEASE 1 YES
- 7) Return to INPUT ZONES Select ESC, ESC
- Select 3 = ZONE 3
- 9) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE WATERFLOW

Down Arrow

- 1 = OUTPUT CIRCUIT MAP
- 1 = ALARM NAC YES
- 2 = RELEASE 1 NO
- 10) Return to INPUT ZONES Select ESC, ESC
- 11) Down Arrow, Select 1 = ZONE 4 (ZONE not wired)
- 12) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE SUPERVSRY AR
- 13) Return to INPUT ZONES Select ESC
- 14) **Select 2 = ZONE 5 (ZONE not wired)
- 15) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE SUPERVSRY AR

Down Arrow, Down Arrow

- 16) Select 2 = DESCRIPTION
- 17) Type "PS COVER" Select ENTER
- 18) Return to INPUT ZONES Select ESC
- 19) Select 3 = ZONE 6
- 20) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE SUPERVSRY AR

Down Arrow, Down Arrow

- 21) Select 2 = DESCRIPTION
- 22) Type "WATER VALVE OFF" Select ENTER
- 23) Select ESC (5 times) until 'Saving System Config' appears

INPUT ZONES

- 1) Select 2 = INPUT ZONES
- 2) Select 1 = ZONE 1
- 3) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE 2-WIRE SMOKE

Down Arrow

- 1 = OUTPUT CIRCUIT MAP
- 1 = ALARM NAC YES
- 2 = RELEASE 1 YES
- 4) Return to INPUT ZONES Select ESC, ESC
- 5) Select 2 = ZONE 2

**NOTE: ULC OPTION

- Must use RP-2001C / MRP-2001C
- Must set dip-switch on ANN-LED-PCB board to any # but 0
- Connect ANN-LED-PCB to RP-2001C/MRP-2001C using ANN-BUS.

From PROGRAMMING MENU

- 1) Down Arrow to 3 = SYSTEM SETUP
- 2) Down Arrow, Down Arrow, 1 = CANADIAN OPT YES
- 3) Select ESC to PROGRAMMING MENU
- 4) Down Arrow to 1 = ANN-BUS
- 5) Select 3 = AUTO-CONFIGURE
- 6) Down Arrow to confirm, ANN-LED MODULES: 1
- 7) Select ESC (5 times) until "Saving System Config" appears

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PROGRAMMING MATRIX FOR DRAWING W-SCHEM-745-020 (TRIM SELECTION 05, 06, 07)

SYSTEM SET UP - WHEN SCREEN READS "SYSTEM ALL NORMAL"

- 1) Select MODE
- 2) Select 2 = PROGRAMMING MODE
- 3) Enter user password 5 digits
- 4) Down Arrow, Select 3 = SYSTEM SETUP
- 5) Select 3 = BANNER
- 6) Select 2 = USER BANNER
- 7) Type "(5 spaces) FIRE-PAC" Select ENTER, ENTER
- 8) Return to SYSTEM SETUP Select ESC
- 9) Select 2 = TIMERS
- 10) Select 1 = SOAK 1
- 11) Select 1 = ALWAYS ON
- 12) Return to main programming menu Select ESC, ESC

OUTPUT CIRCUITS

- 1) Up Arrow, Select 3 = OUTPUT CIRCUITS
- 2) Select 1 = OUTPUT 1
- 3) Set to the following
 - 1 = ENABLED YES
 - 2 = TYPE ALARM NAC
- 4) Return to OUTPUT CIRCUITS Select ESC
- 5) Select 3 = OUTPUT 3
- 6) Set to the following
 - 1 = ENABLED YES
 - 2 = TYPE SUPV BELL NAC
- 7) Return to OUTPUT CIRCUITS Select ESC
- 8) Select 2 = OUTPUT 2
- 9) Set to the following
 - 1 = ENABLED YES
 - 2 = TYPE RELEASE CIR 1 UNSUPV SHORTS
- 10) Return to OUTPUT CIRCUITS Select ESC
- 11) Down Arrow, Select 1 = OUTPUT 4
- 12) Set to the following
 - 1 = ENABLED YES
 - 2 = TYPE TROUBLE BELL NAC
- 13) Return to main programming menu Select ESC, ESC

INPUT ZONES

- 1) Select 2 = INPUT ZONES
- 2) Select 1 = ZONE 1
- 3) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE 2-WIRE SMOKE

Down Arrow

- 1 = OUTPUT CIRCUIT MAP
- 1 = ALARM NAC YES
- 2 = RELEASE 1 YES
- 4) Return to INPUT ZONES Select ESC, ESC
- 5) Select 2 = ZONE 2

- 6) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE PULL STATION

Down Arrow

- 1 = OUTPUT CIRCUIT MAP
- 1 = ALARM NAC YES
- 2 = RELEASE 1 YES
- 7) Return to INPUT ZONES Select ESC, ESC
- 8) Select 3 = ZONE 3
- 9) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE WATERFLOW

Down Arrow

- 1 = OUTPUT CIRCUIT MAP
- 1 = ALARM NAC YES
- 2 = RELEASE 1 NO
- 10) Return to INPUT ZONES Select ESC, ESC
- 11) Down Arrow Select 1 = ZONE 4 (Codes 7B and 7C, go to step A)
- 12) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE SUPERVISORY AR

Down Arrow, Down Arrow

- 13) Select 2 = DESCRIPTION
- 14) Type "LOW/HIGH AIR" Select ENTER
- 15) Return to INPUT ZONES Select ESC
- 16) **Select 2 = ZONE 5
- 17) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE SUPERVSRY AR

Down Arrow, Down Arrow

- 18) Select 2 = DESCRIPTION
- 19) Type "PS COVER" Select ENTER
- 20) Return to INPUT ZONES Select ESC
- 21) Select 3 = ZONE 6
- 22) Down Arrow to EDIT, set to the following

1=ENABLED YES

2=TYPE SUPERVSRY AR

Down Arrow, Down Arrow

- 23) Select 2 = DESCRIPTION
- 24) Type "WATER/AIR COMP OFF" Select ENTER
- 25) Return to main programming menu Select ESC, ESC
- 26) Go to Step B if Double Interlock/Cross Zone (06)
- 27) Select ESC (3 times) until "Saving System Config" appears

**NOTE: ULC OPTION

- Must use RP-2001C / MRP-2001C
- Must set dip-switch on ANN-LED-PCB board to any # but 0
- Connect ANN-LED-PCB to RP-2001C / MRP-2001C using ANN-BUS.

From PROGRAMMING MENU

- 1) Down Arrow to 3 = SYSTEM SETUP
- 2) Down Arrow, Down Arrow, 1 = CANADIAN OPT YES
- 3) Select ESC to PROGRAMMING MENU
- 4) Down Arrow to 1 = ANN-BUS
- 5) Select 3 = AUTO-CONFIGURE
- 6) Down Arrow to confirm, ANN-LED MODULES: 1
- 7) Select ESC (5 times) until "Saving System Config" appears

REV_M

A. PREACTION DOUBLE-INTERLOCKED, ELECTRIC (ELECTRIC-PNEUMATIC/ELECTRIC) – TRIM SELECTION 07B, 07C

- 1) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE COMBO SUP AR

Down Arrow

- 1 = OUTPUT CIRCUIT MAP
- 1 = ALARM NAC YES
- 2 = RELEASE 1 YES
- 2) Return to INPUT ZONE 4 Select ESC
- 3) Down Arrow to 2 = DESCRIPTION
- 4) Type "LOW/HIGH AIR" Select ENTER
- 5) Return to main programming menu Select ESC, ESC

CROSS ZONE

Down Arrow

- 1) Select 1 = CROSS INPUT ZONES
- 2) Select 1 = RELEASE 1 GROUPS
- 3) Select 1 = NONE
- 4) 1 = ZONE 1 YES
- 5) Down Arrow to 1 = ZONE 4 YES
- 6) Select ESC, ESC to REL 1 CROSS GROUPS
 - $1 = X \ 1 \ 4$
 - 2 = NONE
- 7) Select 2 = NONE
- 8) 2 = ZONE 2 YES
- 9) Down Arrow to 1 = ZONE 4 YES
- 10) Select ESC, ESC to REL 1 CROSS GROUPS (Confirm Setting)
 - $1 = X \ 1 \ 4$
 - 2 = X 2 4
- 11) Return to main programming menu Select ESC, ESC
- 12) Up Arrow, Select 2 = INPUT ZONES
- 13) Down Arrow, then continue from Step 16 on page 17

B. PREACTION DOUBLE-INTERLOCKED, ELECTRIC – TRIM SELECTION 06

- 1) Down Arrow
- 2) Select 1 = CROSS INPUT ZONES
- 3) Select 1 = RELEASE 1 GROUPS
- 4) Select 1 = NONE
- 5) 1 = ZONE 1 YES
- 6) 2 = ZONE 2 YES
- 7) Select ESC, ESC to REL 1 CROSS GROUPS
 - $1 = X \ 1 \ 2$
 - 2 = NONE
- 8) Select ESC, ESC, then continue from Step 27 on page 17

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PROGRAMMING MATRIX FOR DRAWING W-SCHEM-745-030 AND W-SCHEM-745-050 (TRIM SELECTION 08, 01, 02, 03, 7D)

SYSTEM SET UP - WHEN SCREEN READS "SYSTEM ALL NORMAL"

- Select MODE
- 2) Select 2 = PROGRAMMING MODE
- 3) Enter user password 5 digits
- 4) Down Arrow, Select 3 = SYSTEM SETUP
- 5) Select 3 = BANNER
- 6) Select 2 = USER BANNER
- 7) Type "(5 spaces) FIRE-PAC" Select ENTER, ENTER
- 8) Return to main programming menu Select ESC, ESC

OUTPUT CIRCUITS

- 1) Up Arrow, Select 3 = OUTPUT CIRCUITS
- 2) Select 1 = OUTPUT 1
- 3) Set to the following
 - 1 = ENABLED YES
 - 2 = TYPE ALARM NAC
- 4) Return to OUTPUT CIRCUITS Select ESC
- 5) Select 2 = OUTPUT 2 (Not Wired)
- Set to the following
 - 1 = ENABLED YES
 - 2 = TYPE WATERFLOW NAC
- 7) Return to OUTPUT CIRCUITS Select ESC
- 8) Select 3 = OUTPUT 3
- 9) Set to the following
 - 1 = ENABLED YES
 - 2 = TYPE SUPV BELL NAC
- 10) Return to OUTPUT CIRCUITS Select ESC
- 11) Down Arrow, Select 1 = OUTPUT 4
- 12) Set to the following
 - 1 = ENABLED YES
 - 2 = TYPE TROUBLE BELL NAC
- 13) Return to main programming menu Select ESC, ESC

INPUT ZONES

- 1) Select 2 = INPUT ZONES
- 2) Select 1 = ZONE 1
- 3) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE 2-WIRE SMOKE

Down Arrow

- 1 = OUTPUT CIRCUIT MAP
- 1 = ALARM NAC YES
- 2 = WATERFLOW NAC NO
- 4) Return to INPUT ZONES Select ESC, ESC
- 5) Select 2 = ZONE 2

- 6) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE PULL STATION

Down Arrow

- 1 = OUTPUT CIRCUIT MAP
- 1 = ALARM NAC YES
- 2 = WATERFLOW NAC NO
- 7) Return to INPUT ZONES Select ESC, ESC
- 8) Select 3 = ZONE 3
- 9) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE WATERFLOW

Down Arrow

- 1 = OUTPUT CIRCUIT MAP
- 1 = ALARM NAC YES
- 2 = WATERFLOW NAC NO
- 10) Return to INPUT ZONES Select ESC, ESC
- 11) Down Arrow, Select 1 = ZONE 4
- 12) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE SUPERVSRY AR

Down Arrow. Down Arrow

- 13) Select 2 = DESCRIPTION
- 14) Type "LOW/HIGH AIR" Select ENTER
- 15) Return to INPUT ZONES Select ESC
- 16) **Select 2 = ZONE 5
- 17) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE SUPERVSRY AR

Down Arrow, Down Arrow

- 18) Select 2 = DESCRIPTION
- 19) Type "PS COVER" Select ENTER
- 20) Return to INPUT ZONES Select ESC
- 21) Select 3 = ZONE 6
- 22) Down Arrow to EDIT, Set the following
 - 1 = ENABLED YES
 - 2 = TYPE SUPERVSRY AR

Down Arrow, Down Arrow

- 23) Select 2 = DESCRIPTION
- 24) Type "WATER/AIR COMP OFF" Select ENTER
- 25) Select ESC (5 times) until "Saving System Config" appears

**NOTE: ULC OPTION

- Must use RP-2001C / MRP-2001C
- Must set dip-switch on ANN-LED-PCB board to any # but 0
- Connect ANN-LED-PCB to RP-2001C / MRP-2001C using ANN-BUS.

From PROGRAMMING MENU

- 1) Down Arrow to 3 = SYSTEM SETUP
- 2) Down Arrow, Down Arrow, 1 = CANADIAN OPT YES
- 3) Select ESC to PROGRAMMING MENU
- 4) Down Arrow to 1 = ANN-BUS
- 5) Select 3 = AUTO-CONFIGURE
- 6) Down Arrow to confirm, ANN-LED MODULES: 1
- 7) Select ESC (5 times) until "Saving System Config" appears

PROGRAMMING MATRIX FOR DRAWING W-SCHEM-745-060 (TRIM SELECTION 5B, 6B, 7F, 7H)

SYSTEM SET UP - WHEN SCREEN READS "SYSTEM ALL NORMAL"

- 1) Select MODE
- 2) Select 2 = PROGRAMMING MODE
- 3) Enter user password 5 digits
- 4) Down Arrow, Select 3 = SYSTEM SETUP
- 5) Select 3 = BANNER
- 6) Select 2 = USER BANNER
- 7) Type "(5 spaces) FIRE-PAC" Select ENTER, ENTER
- 8) Return to SYSTEM SETUP Select ESC
- 9) Select 2 = TIMERS
- 10) Select 1 = SOAK 1
- 11) Select 1 = ALWAYS ON
- 12) Return to main programming menu Select ESC, ESC

OUTPUT CIRCUITS

- 1) Up Arrow, Select 3 = OUTPUT CIRCUITS
- 2) Select 1 = OUTPUT 1
- 3) Set to the following
 - 1 = ENABLED YES
 - 2 = TYPE ALARM NAC
- 4) Return to OUTPUT CIRCUITS Select ESC
- 5) Select 3 = OUTPUT 3
- 6) Set to the following
 - 1 = ENABLED YES
 - 2 = TYPE SUPV BELL NAC
- 7) Return to OUTPUT CIRCUITS Select ESC
- 8) Select 2 = OUTPUT 2
- 9) Set to the following
 - 1 = ENABLED YES
 - 2 = TYPE RELEASE CIR 1 UNSUPV SHORTS
- 10) Return to OUTPUT CIRCUITS Select ESC
- 11) Down Arrow, Select 1 = OUTPUT 4
- 12) Set to the following
 - 1 = ENABLED YES
 - 2 = TYPE TROUBLE BELL NAC
- 13) Return to main programming menu Select ESC, ESC

INPUT ZONES

- 1) Select 2 = INPUT ZONES
- 2) Select 1 = ZONE 1
- Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE 2-WIRE SMOKE

Down Arrow

- 1 = OUTPUT CIRCUIT MAP
- 1 = ALARM NAC YES
- 2 = RELEASE 1 YES
- 4) Return to INPUT ZONES Select ESC, ESC
- 5) Select 2 = ZONE 2

- 6) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE PULL STATION

Down Arrow

- 1 = OUTPUT CIRCUIT MAP
- 1 = ALARM NAC YES
- 2 = RELEASE 1 YES
- 7) Return to INPUT ZONES Select ESC, ESC
- 8) Select 3 = ZONE 3
- 9) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE WATERFLOW

Down Arrow

- 1 = OUTPUT CIRCUIT MAP
- 1 = ALARM NAC YES
- 2 = RELEASE 1 NO
- 10) Return to INPUT ZONES Select ESC, ESC
- 11) Down Arrow Select 1 = ZONE 4 (Codes 7H and 7J, go to step C on page 21)
- 12) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE SUPERVISORY AR

Down Arrow, Down Arrow

- 13) Select 2 = DESCRIPTION
- 14) Type "LOW/HIGH AIR" Select ENTER
- 15) Return to INPUT ZONES Select ESC
- 16) Select 2 = ZONE 5
- 17) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE SUPERVSRY AR

Down Arrow, Down Arrow

- 18) Select 2 = DESCRIPTION
- 19) Type "LATCH POWER LOSS" Select ENTER
- 20) Return to INPUT ZONES Select ESC
- 21) Select 3 = ZONE 6
- 22) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE SUPERVSRY AR

Down Arrow, Down Arrow

- 23) Select 2 = DESCRIPTION
- 24) Type "WATER/AIR COMP OFF" Select ENTER
- 25) Return to main programming menu Select ESC, ESC
- 26) Go to Step D on page 21 if Double Interlocked/Cross Zone (6B, 7H)
- 27) Select ESC (3 times) until "Saving System Config" appears

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C. PREACTION DOUBLE-INTERLOCKED, ELECTRIC (ELECTRIC-PNEUMATIC/ELECTRIC) – TRIM SELECTION 07B, 07C

- 1) Down Arrow to EDIT, set to the following
 - 1 = ENABLED YES
 - 2 = TYPE COMBO SUP AR

Down Arrow

- 1 = OUTPUT CIRCUIT MAP
- 1 = ALARM NAC YES
- 2 = RELEASE 1 YES
- 2) Return to INPUT ZONE 4 Select ESC
- 3) Down Arrow to 2 = DESCRIPTION
- 4) Type "LOW/HIGH AIR" Select ENTER
- 5) Return to main programming menu Select ESC, ESC

CROSS ZONE

Down Arrow

- 1) Select 1 = CROSS INPUT ZONES
- 2) Select 1 = RELEASE 1 GROUPS
- 3) Select 1 = NONE
- 4) 1 = ZONE 1 YES
- 5) Down Arrow to 1 = ZONE 4 YES
- 6) Select ESC, ESC to REL 1 CROSS GROUPS
 - 1 = X 1 4
 - 2 = NONE
- 7) Select 2 = NONE
- 8) 2 = ZONE 2 YES
- 9) Down Arrow to 1 = ZONE 4 YES
- 10) Select ESC, ESC to REL 1 CROSS GROUPS (Confirm Setting)
 - 1 = X 1 4
 - 2 = X 2 4
- 11) Return to main programming menu Select ESC, ESC
- 12) Up Arrow, Select 2 = INPUT ZONES
- 13) Down Arrow, then continue from Step 16 on page 20

D. PREACTION DOUBLE-INTERLOCKED, ELECTRIC – TRIM SELECTION 06

- 1) Down Arrow
- 2) Select 1 = CROSS INPUT ZONES
- 3) Select 1 = RELEASE 1 GROUPS
- 4) Select 1 = NONE
- 5) 1 = ZONE 1 YES
- 6) 2 = ZONE 2 YES
- 7) Select ESC, ESC to REL 1 CROSS GROUPS
 - $1 = X \ 1 \ 2$
 - 2 = NONE
- 8) Select ESC, ESC, then continue from Step 27 on page 20

Series 745 FireLock[™] Fire-Pac for FireLock NXT[™] Valves

