

## DV-5 Red-E Cabinet, Middle East, Outdoor and Indoor Integrated Fire Protection Package, Electric Actuation

### General Description

The TYCO DV-5 Red-E Cabinet, Middle East is a pre-assembled fire protection valve package enclosed within a free-standing cabinet designed to occupy minimal floor space and provide an enclosure for a fire protection valve riser. The packaged DV-5 Red-E Cabinet is pre-wired and the water inlet and outlets to the valve riser are grooved. The valve package includes the system (manual) shut-off control valve, a downstream shut-off valve, an automatic water control valve with electric actuation with galvanized trim, and supervisory switches.

All switches within the cabinet are pre-wired to a junction box. An optional control panel is available and is pre-wired. The control panel can be used to make the electrical connections for power, detection circuits, and alarms, the only remaining connections to complete the system.

In addition to the control panel being integral to the DV-5 Red-E Cabinet, Middle East, windows have been provided in the door for viewing the essential system pressure gauges. Locks for the cabinet door and the control panel (optional) access are standard. The outdoor version of the DV-5 Red-E Cabinet, Middle East have sealed doors and connections to the elements.

The DV-5 Red-E Cabinet Middle East is available with different options such as:

- Heater
- Light and socket plug 230VAC
- Water Motor Alarm, WMA-1
- Low Temperature Switch
- Manual Pull Station accessible from the outside of the cabinet
- Without downstream Butterfly Valve
- Cabinet color Grey (RAL7035)

#### IMPORTANT

Refer to Technical Data Sheet TFP2300 for warnings pertaining to regulatory and health information.

- Potter Release Panel
- Handbook
- Factory acceptance test
- Split flanges (adapter grooved to flanged)

#### NOTICE

*The DV-5 Red-E Cabinets, Middle East described herein must be installed and maintained in compliance with this document and with the applicable standards of the NATIONAL FIRE PROTECTION ASSOCIATION, in addition to the standards of any authorities having jurisdiction. Failure to do so may impair the performance of these devices.*

*The owner is responsible for maintaining their fire protection system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.*

### Technical Data

#### Approvals

The Pre-trimmed DV-5 valves used in the Red-E Cabinets are UL Listed according to the data sheet related to the actuation.

#### Working Pressure Range

1,4 to 17,2 bar (20 to 250 psi)

#### Construction

The Red-E Cabinet is constructed of 2 mm (14 gauge steel) and is free standing. The standard paint finish is bright red (RAL3000). The front door of the enclosure is fully hinged (and removable) to maximize access to the enclosure. The front and back sides of the cabinet can be removed for ease of maintenance.

Figure 1 provides dimensional information for Red-E Cabinets, and Figure 2 illustrates the typical assembly arrangement.

Table A provides list of riser components and a cross reference to individual technical data sheets, as well as individual component laboratory approval information.



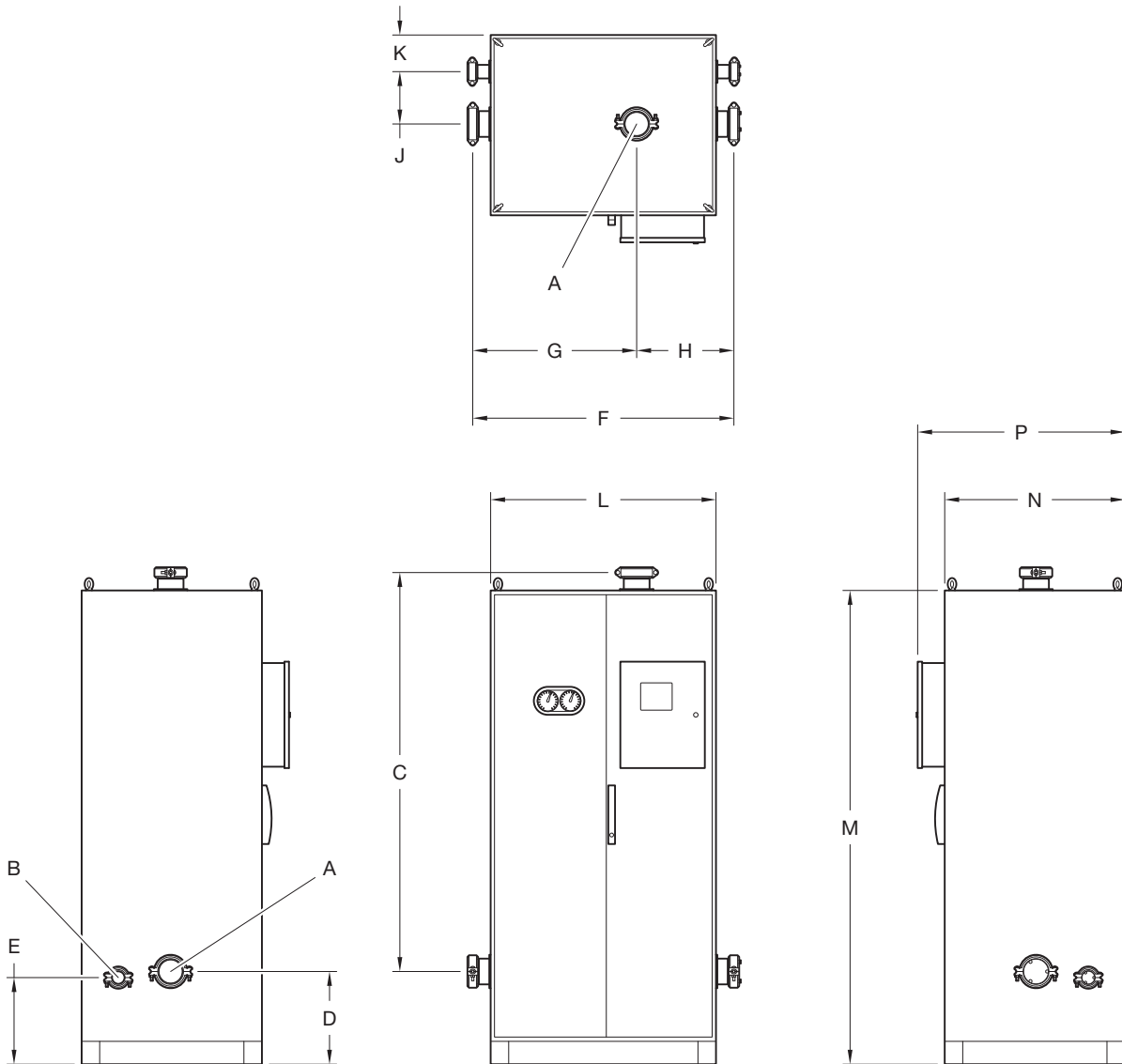
### Design Considerations

The open nozzles and/or sprinklers, fire detection devices, manual pull stations, and signaling devices that are to be utilized with the TYCO DV-5 Red-E Cabinet, Middle East must be UL Listed. The system designer must consider and make preparations for use of a Red-E Cabinet as follows:

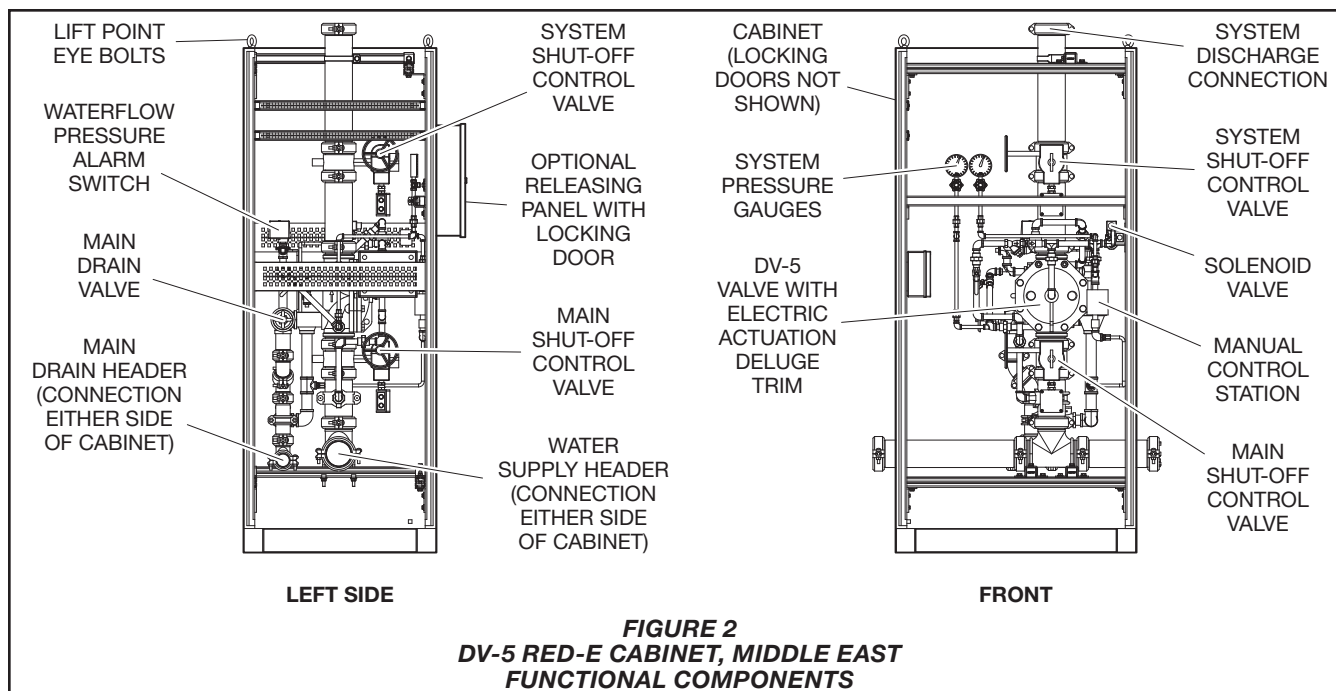
- Adequate floor space to facilitate opening of the cabinet door
- Minimum ambient temperature of 4°C (40°F)
- Installation of a suitably sized water supply to the water supply header (Port A, Fig. 1)
- Installation of system piping (Port B, Fig. 1) including automatic sprinklers and/or nozzles from the Red-E cabinet outlet
- Installation of drains from main drain header (Port B, Fig. 1)
- Installation of compatible detection and alarm devices
- Power supply (230 VAC) to Red-E Cabinet

Nominal Dimensions, mm (Inches)			
Nominal Riser Size			
Dim.	DN100 (4 in.)	DN150 (6 in.)	DN200 (8 in.)
A	DN100 (4)	DN150 (6)	DN200 (8)
B	DN50 (2)	DN50 (2)	DN50 (2)
C	1770 (69.68)	1764 (69.44)	1725 (67.91)
D	411 (16.18)	438 (17.24)	463 (18.22)
E	384 (15.11)	384 (15.11)	384 (15.11)
F	1146 (45.12)	1170 (46.06)	1150 (45.28)
G	721 (28.39)	693 (27.28)	708 (27.87)

Nominal Dimensions, mm (Inches)			
Nominal Riser Size			
Dim.	DN100 (4 in.)	DN150 (6 in.)	DN200 (8 in.)
H	425 (16.73)	477 (18.78)	442 (17.40)
J	232 (9.13)	232 (9.13)	236 (9.29)
K	163 (6.42)	163 (6.42)	163 (6.42)
L	1000 (39.37)	1000 (39.37)	1000 (39.37)
M	2102 (82.75)	2102 (82.75)	2102 (82.75)
N	800 (31.50)	800 (31.50)	800 (31.50)
P	920 (36.22)	920 (36.22)	920 (36.22)



**FIGURE 1**  
**DV-5 RED-E CABINET, MIDDLE EAST**  
**INSTALLATION DIMENSIONS**



**FIGURE 2**  
**DV-5 RED-E CABINET, MIDDLE EAST**  
**FUNCTIONAL COMPONENTS**

## **Installation**

The TYCO DV-5 Red-E Cabinet, Middle East is to be installed following the directions given in the provided data sheets and additional information provided with the Red-E Cabinet. Instructions pertain to the following items:

- Control Valves
- Solenoid
- Pressure Switch
- Potter Release Panel (optional)
- Electrical connections
- System start-up

## **Care and Maintenance**

The TYCO DV-5 Red E-Cabinet, Middle East must be maintained and serviced in accordance with this section.

Before closing a fire protection system main control valve for maintenance work on the fire protection system that it controls, permission to shut down the affected fire protection systems must first be obtained from the proper authorities. All personnel who may be affected by this decision must be notified.

The DV-5 Red E-Cabinet, Middle East does not require any regularly scheduled inspection or maintenance. The riser components enclosed within the Red-E Cabinet; however, must be maintained in accordance with their applicable technical data sheet (refer to Table A). The Control Panel must be maintained in accordance with the applicable instructions provided with the Red-E Cabinet.

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards of any authorities having jurisdiction. Contact the installing contractor or product manufacturer with any questions.

## **Red-E Cabinet Technical Support**

Technical support for the TYCO DV-5 Red-E Cabinet, Middle East is available by calling Johnson Controls Dubai, UAE at 971-(0)4-455-0700 or fax at 971-(0)4-455-0799 during regular business hours of 8:30-16:30 GST, Sunday through Thursday.

The Red-E Cabinet Technical Support should be contacted for special request cabinet configurations or electrical connection/control panel programming inquiries.

An answering service will take messages outside of the regular business hours.

Description	Model	Data Sheet	UL	C-UL/ULC	FM	CSA
System Shut-Off Valve, 4 in.-8 in. (DN100-DN200)	BFV-N	TFP1510	X	X	X	
Automatic Water Control Valve	DV-5	TFP1305	X	X	X	
Electric Actuation Trim		TFP1320				
Pressure Alarm Switch	PS10-2		X(2)	X(2)	X(2)	
Control Panel <sup>(1)</sup> (Potter Release Panel optional)	PFC-4410RC		X(2)	X(2)	X(2)	

(1) Approvals under the name of Milwaukee Valve Company.  
(2) Approvals under the name of Potter Electric Signal Company.

**TABLE A**  
**PRINCIPAL COMPONENTS**  
**TECHNICAL DATA SHEETS AND LABORATORY APPROVALS**

## Limited Warranty

For warranty terms and conditions, visit [www.tyco-fire.com](http://www.tyco-fire.com).

## Ordering Procedure

The Part Numbers in this section are provided for standard cabinets. The standard valve package includes the system (manual) shut-off control valve, a downstream shut-off valve, the automatic water control valve with electric actuation with galvanized trim and supervisory switches.

The TYCO DV-5 Red E-Cabinet, Middle East can be provided with the following options:

- Heater
- Light and socket plug 230VAC
- Water Motor Alarm, WMA-1
- Low Temperature Switch
- Manual Pull Station accessible from the outside
- Without downstream Butterfly valve
- Cabinet color Grey RAL7035
- Potter Release Panel
- Handbook
- Factory acceptance test
- Split flanges (adapter grooved to flanged)

### Standard Part Numbers RED-E Cabinet Electric Actuation

#### Indoor Use\*

4 Inch Electric Actuation . . . . . CIM9047220400  
6 Inch Electric Actuation . . . . . CIM9067220400  
8 Inch Electric Actuation . . . . . CIM9087220400

#### Outdoor Use\*

4 Inch Electric Actuation . . . . . COM9047220400  
6 Inch Electric Actuation . . . . . COM9067220400  
8 Inch Electric Actuation . . . . . COM9087220400

\*Other configurations (dry, wet, preaction, etc.) and sizes are available upon request.