

# 50% more tank protection during overpressure events

- Reduce environmental impact and clean up
- Protect workers and assets from dangerous oil exhaust
- Corrosion resistant construction
- Highly flexible installation

## **Product Summary**

Description Mechanical overpressure protection device with integrated directional discharge outlet. Provides pressure relief and insulating fluid containment (requires optional piping) on transformers and load tap changers during overpressure conditions. Automatically reseals once pressure has fallen.

Application For maximum overpressure protection on critical oil filled transformers, load tap changers and other liquid filled apparatus.





## **QUALITROL**<sup>®</sup> XPRD extra protection relief device

50% more tank protection during overpressure events	<ul> <li>Larger diameter throat and discharge outlet for increased flow</li> <li>Flow rate of 12,600 SCFM—independently verified by third party, exceeds IEC and CE standards</li> <li>Dual spring-loaded valve for precise operation and resealing</li> <li>Patented single-piece, dual-acting gasket for quick, consistent operation with leak-free resealing</li> </ul>	
Reduce environmental impact and clean up	<ul> <li>Improved environmental protection with directed flow for easy clean up</li> <li>Optional piping can be used to discharge to containment vessels</li> </ul>	
Protect workers and assets from dangerous oil exhaust	<ul> <li>Directed flow with piped discharge dramatically minimized risk of hot oil reaching workers and equipment</li> <li>Improved environmental protection with directed flow for easy clean up</li> <li>Optional piping can be used to discharge to containment</li> </ul>	
Corrosion resistant construction	<ul> <li>Salt water resistant stainless steel cover and valve components</li> <li>Springs made from ASTM A229 oil-tempered spring wire with corrosion resistant epoxy/polyester coating in accordance with ASTM B117-90</li> <li>Alarm switch housing and mounting flange made from die-cast aluminum with chromate and polyester coating</li> <li>Aluminum alarm indicator assembly</li> </ul>	
Highly flexible installation	<ul> <li>Utilizes same bolt pattern as the industry standard QUALITROL large pressure relief device enabling direct retrofit</li> <li>Variety of alarm switches available to fit various alarm and wiring schemes</li> <li>Rotatable discharge outlet for easy installation of discharge piping</li> <li>Variety of discharge piping, flanges, and animal screens available</li> </ul>	

#### **Components and accessories**

#### Aluminum piping (PPE-600-1, CPG-601-1)



- Most robust solution for directed flow
- Optional bolt type compression coupling design does not require welding (CPG-602-1)
- Large radius elbow (ELB-600-1) insures maximum flow, a 90 degree mitered elbow (ELB-601-1) is available for more compact installation
- Compatible with protective screen (SCN-600-1)

#### **PVC** piping option (KIT-046)



- Most affordable solution for directed flow
- Threaded PVC adaptors available (ADP-635-X)
- Compatible with protective screen (SCN-600-1)

#### Protective screen (SCN-600-1)



- Stepped radius allows for mounting to various diameter piping
- Designed to mount directly to the QUALITROL XPRD or QUALITROL Aluminum and PVC piping



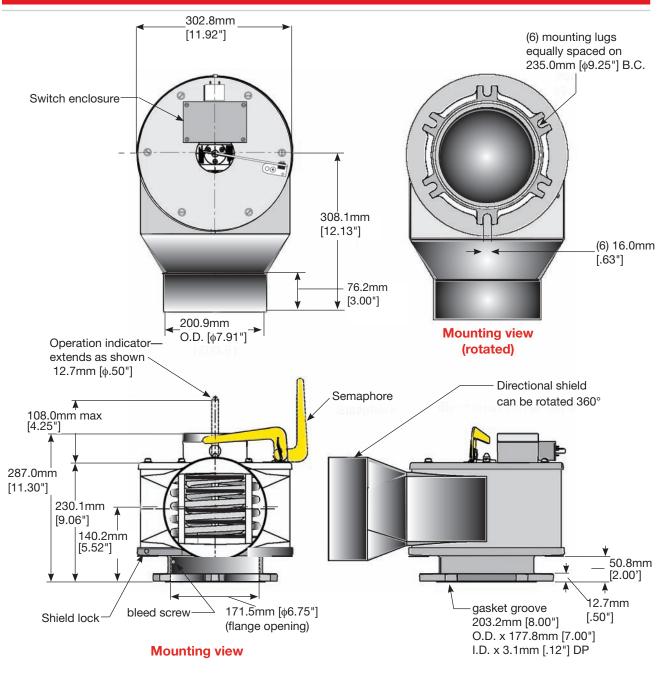


## TECHNICAL SPECIFICATIONS

Mechanical	Recommended tank opening	171.5 mm [6.75"]
	Shield turning radius:	323.3 mm [12.73"]
Electrical	Switch options	10 A@ 125/250 VAC (standard)
		0.5 A @ 125 VDC non-inductive
		0.25 A @ 250 VDC non-inductive
		High DC (SPDT only): 10 A @ 125 VDC
		Low level circuit (gold plated contacts): 0.1 A @ 125 VAC
		DPDT: 10 A@ 125/250 VAC, 0.5 A @ 125 VDC non-inductive, 0.25 A @ 250 VDC non-inductive, 0.25 A @ 250 VDC non-inductive
	Dielectric strength	2000 VAC, 50/60 Hz for 1 minute
Environmental	Ambient operating temperature	-40°C to 80°C (-40°F to 176°F) tank fluid at 30°C
	Salt spray testing	Materials and coating withstand 1000 hours of salt spray testing per ASTM B:117 with no appreciable loss of strength in any structural members
	Switch enclosure	Meets IP54 requirements
Materials	Base flange	Cast aluminum, ASA 70 light gray polyester powder coat
	Ring	Cast aluminum, chromate conversion coated
	Valve	Stainless steel, sealing areas lubricated with silicone based lubricant
	Indicator (semaphore)	Nylon or epoxy/polyester painted aluminum
	Spring	ASTM A229 oil-tempered spring wire, epoxy/polyester painted
	Gaskets	Nitrile (standard) or viton (optional)
	Shield/hardware	Stainless steel
	Alarm switch enclosure	Die-cast aluminum with polyester powder coats
Relief protection	Flow rate	12,600 standard feet <sup>3</sup> per minute at 15 PSI with 10 PSI operating pressure

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#### **QUALITROL® Field Services**

To further improve reliability, QUALITROL provides comprehensive education and on-site commissioning services, maintenance contracts and technical support to all customers worldwide. Emergency response is available on all products and services.

#### About QUALITROL®

QUALITROL® manufactures substation transformer monitoring and protection devices used by electric utilities and manufacturing companies. It is the global leader in sales and installations of transformer asset protection equipment, fault recorders and fault locators. Established in 1945, QUALITROL produces thousands of different types of products on demand, each customized to customers' unique requirements.

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