



## QDF-E Protectors

A wide range of protection are offered as an important part of the QDF product line. Solid state as well as gas tube overvoltage protection is available, and overcurrent protection is also provided in 5-point protectors. All the QDF protectors fit into the QDF-E 10-pair magazines.

### 3-Point overvoltage protection

The QDF-PR-3GT-XXX type, formerly QDF-3CGS-XXX, contains a heavy-duty 3-electrode gas discharge tube. They are used when many large lightning induced voltages are expected on the telecom pairs.

### 5-Point overvoltage and overcurrent protection

The QDF-PR-5GT-XXX type, formerly QDF-5CGS-XXX, contains a heavy-duty 3-electrode gas discharge tube.

The QDF-PR-5SS-XXX type, formerly QDF-5CSS-XXX, is a solid state protector designed for use in applications that demand the extremely fast operation and low operating voltage that only solid state protectors can provide.

There are other different types under request to cover the majority of customer requirements.

Overcurrent protection has been added to all of these 5-point protectors in the form of 2 PTCRs. The overcurrent devices are fast-acting, have low room-temperature resistance and are completely self-restoring when the fault current source is removed from the line.

All QDF protectors are equipped with a heat-operated fail-safe (shorting) mechanism. Sustained operation of the protector, because of the contact with or induction from power lines, will cause operation of the fail-safe device.

The default current may continue to flow, but the heat-generating protector has been bypassed by the fail-safe shunt.

They have an intermediate position to which they can be temporarily withdrawn to remove protection from the equipment side to allow testing of the equipment. This is a partial withdrawal which maintains contact on the cable side.

Testing can then be performed using the 4-wire retractable test/patch cord inserted into the top of the protector.

Non-intrusive testing may be carried out by using the same cord inserted into the top of the protector while it is in the fully inserted position.

## Specifications

### Electrical characteristics

#### Insulation resistance

Measured at 100 V dc, 1.000 MΩ normal version

#### Fail-safe

All our GDT protectors have a fail-safe mechanism

### Mechanical characteristics

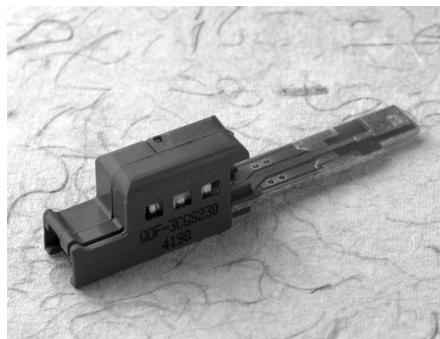
#### Housing

Polyamide self-extinguishing UL-94 V0 rated



## Ordering information

Description	Colour	Product name	Quantity	Tyco code	RPN
<b>3-point, overvoltage protection</b>					
230 V GDT	grey	QDF-3CGS-230	100	1-1192450-9	323726-000
260 V GDT	grey	QDF-3CGS-260	100	4-1195268-3	669104-000
<b>5-point, overvoltage + overcurrent protection</b>					
230 V GDT + PTCRs coated, narrow version	grey	QDF-5CGS-230CN	100	2-1190969-7	133454-000
260 V GDT + PTCRs non coated, narrow version	grey	QDF-5CGS-260RN	100	0-1191689-9	229810-000
220 V + PTCRs non coated, narrow version	blue	QDF-5CSS-220RN	100	4-1190298-7	038914-000
90 V GDT + 15 V solid state thyristors, narrow version	red	QDF-PR-5GS-090015-RN	100	0-1731057-2	A14534-000
90 V GDT + 95 V solid state thyristors, narrow version	red	QDF-PR-5GS-090095-RN	100	0-1731057-1	A14198-000
230 V GDT + PTCRs non coated, short version	grey	QDF-PR-5GT-230-RS	100	7-1198253-8	906432-000
260 V GDT + PTCRs non coated, short version	grey	QDF-PR-5GT-260-RS	100	6-1192362-9	312272-000
220 V GDT + PTCRs non coated, short version	blue	QDF-PR-5SS-220-RS	100	1-1196188-7	800290-000



3-Point protector



5-Point protector, narrow version



5-Point protector, short version

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