

Protection

Circuit protection

QOvs circuit breakers

10000 A

IEC/EN 60898-1

As per the above standard:

- QOvs Plug-on type is a circuit breaker which combines the following functions:
 - circuit protection against short-circuit currents,
 - circuit protection against overload currents,
 - fault tripping indication by red mechanical indicator.



Catalog numbers

Circuit breakers	QOvs		
	10000		
Type	1P	2P	3P
Rating (In)	Curve C		
10 A	QO110VSC10	QO210VSC10	QO310VSC10
16 A	QO116VSC10	QO216VSC10	QO316VSC10
20 A	QO120VSC10	QO220VSC10	QO320VSC10
25 A	QO125VSC10	-	QO325VSC10
32 A	QO132VSC10	QO232VSC10	QO332VSC10
40 A	QO140VSC10	-	QO340VSC10
50 A	QO150VSC10	-	QO350VSC10
63 A	QO163VSC10	-	QO363VSC10

Plug-on system

- Fast, easy installation
- No connection errors
- Safety

Finger proof IP20 busbar

- Fast contact closure



VisiSafe window

- Fault tripping is indicated by a red mechanical indicator on the front face

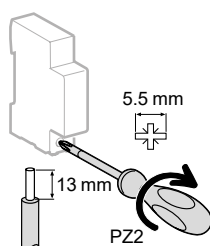
Protection

Circuit protection

QOvs circuit breakers

10000 A

Connection

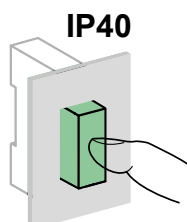


Rating		Tightening torque	Copper cables	
L and N out	10 to 63 A		Rigid	Flexible or with ferrule
	10 to 25 A	2 N.m	1 to 25 mm ²	1 to 25 mm ²
	32 to 63 A	2 N.m	2.5 to 35 mm ²	2.5 to 35 mm ²
L in		Plug-on type		

■ Connection by busbar or cables (as per EN 50027).

Technical data

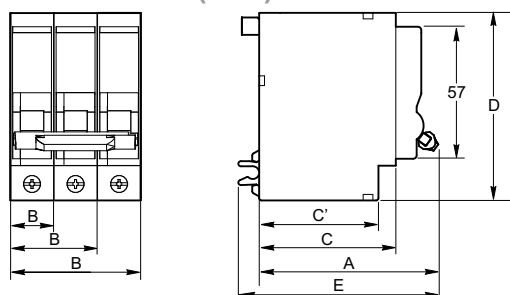
Main characteristics			QOvs 10 kA
Insulation voltage (U _i)			500 V AC
Operating voltage (U _e)			240/415 V AC
Rated impulse withstand voltage (U _{imp})			4 kV according to IEC 60898-1
Reference temperature			40°C
Operating frequency			50/60 Hz
Pollution degree			3
Magnetic tripping	Curve C	5 to 10 I _n	■
According to IEC/EN 60898-1			
Limitation class			3
Rated breaking capacity (I _{cn})			10000 A
			1P, 240 V AC
			2P, 240/415 V AC
			3P, 240/415 V AC
Service breaking capacity (I _{cs})			75 % I _{cn}
Additional characteristics			
Degree of protection (IEC 60529)	Device in modular enclosure	IP40	
		Insulation class II	
Endurance (O-C)		Electrical	4000 cycles
		Mechanical	20,000 cycles
Operating temperature			-5°C to +60°C
Storage temperature			-40°C to +85°C
Tropicalization (IEC 60068-1)			Treatment 2 (relative humidity 95 % to 55°C)



Weight (g)

Circuit breaker	
Type	QOvs
1P	104
2P	208
3P	312

Dimensions (mm)



Circuit breaker							
Type	Number of poles	A	B	C	C'	D	E
QOvs	1P	78.3	18.7	58.8	51.4	81	86.3
	2P	78.3	37.4	58.8	51.4	81	86.3
	3P	78.3	56.1	58.8	51.4	81	86.3

Protection / Earth leakage protection

QOvs RCBO residual current devices

10000 A

IEC 61009-1
IEC 61009-2-2
BS EN 61009-1



As per the above standards:

- The single-phase QOvs RCBO's self-contained residual current device carries out complete protection of final circuits:
- protection against short-circuits and cable overloads
- protection of persons against electric shock by direct contact (30 mA sensitivity),
- protection of persons against electric shock by indirect contact,
- protection of equipment against fires set by leakage currents.
- The neutral is not interrupted when the device is tripped. Hence QOvs RCBO can be used on most circuits, except for the ones operating under TT or IT earthing systems.

Catalog numbers

QOvs RCBO			10000
Type			AC
1P+N	Curve B	Sensitivity	30 mA
	Rating	6 A	QO106B10RCBO30F
		10 A	QO110B10RCBO30F
		16 A	QO116B10RCBO30F
		20 A	QO120B10RCBO30F
		32 A	QO132B10RCBO30F
		40 A	QO140B10RCBO30F
		50 A	QO150B10RCBO30F
	Curve C	Sensitivity	30 mA
	Rating	6 A	QO106C10RCBO30F
		10 A	QO110C10RCBO30F
		16 A	QO116C10RCBO30F
		20 A	QO120C10RCBO30F
		32 A	QO132C10RCBO30F
		40 A	QO140C10RCBO30F
		50 A	QO150C10RCBO30F
Voltage rating (Ue)			230/240 V AC
Operating frequency			50/60 Hz ± 5 %

Plug-on system

- Fast, easy installation
- No connection errors
- Safety



Fast contact closure



Disconnection

- Positive contact indication



Test "T"

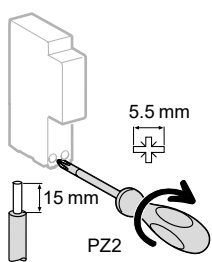
- Operating test button, on the front panel

QOvs RCBO residual current devices

10000 A

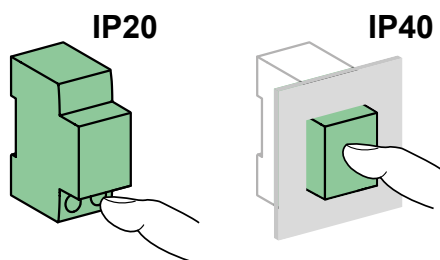
Connection

Rating	Tightening torque	Copper cables	
		Rigid	Flexible or with ferrule
6 to 50 A			
L and N out L in	2 N.m Plug-on type	1 to 16 mm ²	1 to 10 mm ²



Technical data

Main characteristics		
Earth leakage protection with instantaneous tripping	30 mA	Depending on the voltage
	100 mA	
Setting temperature for ratings		40°C
Tripping curve	Curve B	The magnetic tripping devices act at between 3 and 5 I _n
	Curve C	The magnetic tripping devices act at between 5 and 10 I _n
Rated breaking capacity (I _{cn})		10,000 A
Rated residual breaking and making capacity (I _{Δm})		7500 A
Minimum operating voltage of test button		187 V AC
Endurance (O-C)	Electrical	5000 cycles
	Mechanical	20,000 cycles
Degree of protection	Device only	IP20
	Device in modular enclosure	IP40 Insulation class II
Insulation voltage (U _i)		400 V
Rated impulse withstand voltage (U _{imp})		4 kV
Operating temperature		-15°C to +60°C
Storage temperature		-40°C to +85°C
Surge current withstand (8/20 μs) 30 mA without tripping		250 Å
Limitation class		3
Insulation class		2
Tropicalization		Treatment 2 (relative humidity 95 % to 55°C)



Weight (g)

Residual current devices	
Type	
1P+N	186

Dimensions (mm)

