QUADRON®60Classic
Holder for Class J fuses

UL 4248-8
Busbar-mounting
3-pole
Shock-protected
For Class J fuse links in acc. with U L248-8.

Busbar-mounting version:
For mounting on 60mm system to busbars with a thickness of 5 or 10mm, TT and TTT section bars
Screwless busbar contacting; Gentle snapping onto busbar systems.
Conversion from outgoing connection top to bottom by changing connection modules.

Panel-mounting version:
For screwing to mounting plate and fitting to 2 mounting rails EN 60715 at a distance of 125 or 150mm.

Conductor connections:

Size	Conductor connections according to IEC	Conductor connections according to UL /CSA
1 - 30A (21 x 75)	Cu 4 - 35mm² (re/rm, f, f+AE*)	Cu AWG 12-AWG 2/0, str
31 - 60A (27 x 60)	Cu 4 - 35mm² (re/rm, f, f+AE*)	Cu AWG 12-AWG 2/0, str
61 - 100A (29 x 117)	Cu 4 - 35mm² (re/rm, f, f+AE*)	Cu AWG 12-AWG 2/0, str
101 - 200A (41 x 146)	Cu 35 - 150mm² (re/rm, f, f+AE*)	Cu AWG 2-MCM 300, str

* possible reduction of the maximum conductor cross-sections necessary

Size	1 - 30A	31 - 60A	61 - 100A	101 - 200A
Rated voltage	30A	60A	100A	200A
Rated current	600V	600V	600V	600V
Conditional rated short circuit current AC	200kA	200kA	200kA	200kA

QUADRON®60Classic
Holder for Class J fuses

UL 4248-8
Panel-mounting and busbar-mounting
3-pole
Shock protected by clip-on covers
For Class J fuse links in acc. with U L248-8.

Panel-mounting version:
100A, 200A: mounting on 2 EN 60715 mounting rails with a spacing of 125 or 150mm using the mounting set.

Busbar-mounting version:
For mounting on 60mm system to busbars with a thickness of 10mm, TT and TTT section bars.
Screwless busbar contacting; Gentle snapping onto busbar systems.
Conversion from outgoing connection top to bottom by changing connection modules.

Conductor connections:

Size	Conductor connections according to IEC	Conductor connections according to UL /CSA
210 - 400A (54 x 181)	Cu 16 - 300mm² (s(r), f, f+AE*)	Cu AWG 4-MCM 600, str

* possible reduction of the maximum conductor cross-sections necessary

Size		201 - 400A
Rated voltage		600V AC / DC
Rated current		400A
Conditional rated short circuit current AC	Panel-mounting version	200kA
	Busbar-mounting version	65kA

SECUR®Panel
Holder for cylindrical fuses 10 x 85

1-pole
1500V DC / 1000V AC
For fuse links IEC 60269-2 and -6, max. 6.0W.
Snap fastening onto mounting rail EN 60715.

QUADRON®60Classic
NH bus-mounting fuse base

3-pole
Suitable for mounting on a 60mm system with undrilled busbars by locking it into place.
Refitting a connection for top or bottom.

Conductor connections:

Size	Screw connection	Clamp connection	Clamp space terminal box	Prism connection	Other connections
00	M8 70mm²**	Cu 1.5 - 70mm² rm, f+AE, la. Cu 12x (1 - 10) mm	Cu 1.5 - 70mm² f, f+AE Cu 1.5 - 70mm² re, rm 2x10 - 25mm² f+AE, Identical conductors, side by side, square crimping 2x10 - 35mm² f, identical conductors, side by side la. Cu 10 - 13mm wide Clamp space 13 x 13mm	Cu, Al* 1 - 70mm² rm, sm, f, f+AE	Tunnel terminal 3 x Cu 1.5 - 16mm² rm, f+AE Md 3 Nm
1	M10 120mm²**	Cu 70 - 150mm² rm, f, f+AE, la. Cu 18 x (2 - 14) mm	Cu 35 - 185mm² f Cu 35 - 15mm² rm Cu 35 - 120mm² f+AE la. Cu 15.5 - 24mm wide Clamp space 24.5 x 21mm	Cu, Al* 70 - 150mm² rm, sm, f, f+AE	Double prism Cu, 2 x 35 - 70mm² rm, sm, f+AE 2 x 70mm² f

* Connections with aluminium conductors are not maintenance-free (see page 8/2).
** Copper conductor for corresponding rated currents according to IEC/EN 60947-1.

Size	00	1
Type of current	AC (50 - 60Hz) / DC	AC (50 - 60Hz) / DC
Rated operating voltage	690V AC / 440V DC	690V AC / 440V DC
Rated current*	160A	250A
For NH fuses in acc. with IEC 60269-2 with power losses per phase up to	12W	32W

* When continuously operating a number of devices next to each other, pay attention to the rated loading factor in acc. with IEC/EN 61439-2, Table 101.

QUADRON®Panel
NH fuse bases for photovoltaic applications, 1-pole

Design
Version with screw on both sides
Version with internal busbar connection
For NH fuse links in acc. with IEC 60269-6.

Conductor connections:

Size	Busbar outgoing connection	Screw connector
1XL	1/2 x 30 x 10	M 10
2XL/3L	1/2 x 40 x 10	M 12

Installed size	1XL	2XL/3L
Type of current	AC (50 - 60 Hz) / DC	AC (50 - 60Hz) / DC
Rated voltage	1000V AC / 1500V DC	1000V AC / 1500V DC
Rated current	250A	600A
Max. power dissipation of fuse	50W	100W

Information on current capacity and rated diversity factors is available on request or at **www.woehner.com**

QUADRON®
NH bus-mounting fuse bases

For NH fuse links in acc. with IEC 60269-2.
1/3-pole
Size 00 to 160A / size 1 to 250A / size 2 to 400A / size 3 to 630A
690V~/440V-
Max. power dissipation:
Size 00: 12W / size 1: 32W / size 2: 45W / size 3: 60W

Outgoing contacts:
– size 00 screw M8
– size 00 clamp Cu 1.5 - 70mm², s(r), f+AE, fl. Cu max. 12 x 10mm
– size 00 tunnel terminal 3 x Cu 16mm², each 2 x M5
– size 1 screw M10
– size 2 screw M10
– size 3 screw M12

QUADRON®
NH fuse bases

For NH fuse links in acc. with IEC 60269-2.
1/3-pole
Size 00 to 160A / size 1 to 250A / size 2 to 400A / size 3 to 630A
690V~/440V-
Max. power dissipation:
Size 00: 12W / size 1: 32W / size 2: 45W / size 3: 60W

Outgoing contacts:
– size 00 screw M8, Md 12 - 14Nm
– size 00 clamp Cu 1.5 - 70mm², s(r), f+AE, fl. Cu max. 12 x 10mm, Md 3Nm
– size 1 screw M10, Md 18 - 22Nm
– size 1 clamp 2xM6, Md 8 - 10Nm, internal width 17mm
– size 2 screw M10, Md 18 - 22Nm
– size 3 screw M12, Md 28 - 32Nm

QUADRON®60Classic
NH fuse switch disconnector

Panel- and busbar-mounting

3-pole switching
VDE 0660 part 107/EN 60947-3/IEC 60947-3
Shock protection with integrated positive action closure and arc chambers.
Fuses with mechanical retention in disconnector lid.
For NH fuse links in acc. with IEC 60269-2 Size 000 – 00 – 1 – 2 – 3 – 4A.
Front-side degree of protection IP30 as per EN 60529, degree of protection near terminal depends on installation.
Test openings in disconnector lid self-closing.
Recommended mounting position: handle at top.

Busbar-mounting version:
60mm system (sizes 000, 00, 1, 2, 3)
Screwless busbar contacting.
Locks on and makes contact easily and securely.
Refitting a connection for top or bottom is easy.

Panel-mounting version:
– size 000: Fixing on 1 EN 60715 mounting rail with 112.5 or 125mm spacing using fast fixing plate.
– size 00, 1, 2: Fixing on 2 EN 60715 mounting rails with 125 or 150mm spacing using fixing kit.

Size	000	00
Type of current	AC (50 - 60Hz)	AC (50 - 60Hz)
	DC	DC
Rated operating voltage (U_e)**	690V AC	690V AC
	440V DC	440V DC
Rated insulation voltage (U_i)**	800V	800V
Rated surge withstand capacity (U_{imp})**	6kV	6kV
Max. rated operating current (I_e)*	125A	160A
Conditional rated short-circuit current***	50kA	50kA
For NH fuse links in acc. with IEC 60269-2 with power losses per phase up to	9W	12W

* When continuously operating a number of devices next to each other, pay attention to the rated loading factor in acc. with IEC/EN 61439-2, Table 101.

** Electromechanical fuse monitoring AC 24 - 690V, DC 24 - 250V (mains connections). DC specifications: 2 current paths (L1, L3) in series.

*** Type tested with fuses of characteristic gL/gG.

QUADRON®60Classic
NH fuse switch disconnector

Size	1	2	3	4a
Type of current	AC (50 - 60Hz)	AC (50 - 60Hz)	AC (50 - 60Hz)	AC (50 - 60Hz)
	DC	DC	DC	DC
Rated operating voltage (U_e)**	690V AC	690V AC	690V AC	690V AC
	440V DC	440V DC	440V DC	440V DC
Rated insulation voltage (U_i)**	800V	800V	800V	800V
Rated surge withstand capacity (U_{imp})**	6kV	6kV	6kV	8kV
Rated operating current (I_e)*	250A	400A	630A	1600A
Conditional rated short-circuit current***	80kA	50kA	50kA	50kA
For NH fuse links in acc. with IEC 60269-2 with power losses per phase up to	23W	34W	48W	140W

* When continuously operating a number of devices next to each other, pay attention to the rated loading factor in acc. with IEC/EN 61439-2, Table 101.

** Electro-mechanical fuse monitoring AC 24 - 690V, DC 24 - 250V (mains connections).
DC specifications: 2 current paths (L1, L3) in series.

*** Type tested with fuses of characteristic gL/gG.

NH switch disconnector, size NH 1, arc chamber retrofit package for higher utilisation category as an accessory.

Pilot switch for lid position indicator:
Size 00: 1 (changeover) switch can be used.
Size 000, 1, 2, 3: 2 (changeover) switches can be used.
Connections by means of lugs for tabs 2.8 x 0.5mm (e.g. DIN 46245)
Rated operating voltage (rated operating current):
250V AC (5A), 30V DC (4A).

Fuse monitor (size 00, 1, 2, 3):
Use fuses with live grip lugs.

For electronic fuse monitoring see **www.woehner.com**

Electro-mechanical fuse monitoring:
Integrated auxiliary switch: 1 N/O + 1 N/C
Rated operating voltage (rated operating current):
Outgoing auxiliary contacts, conductor connection 4-pole plug 1.5mm^2 re / f/AE
Rated operating voltage (rated operating current):
24V AC (2A), 230V* AC (0.5A)
24V DC (1A), 48V DC (0.3A), 60V DC (0.15A)
Circuit diagram on page 9/49.
* Level of soiling 2, excess voltage category II

QUADRON®60Classic
NH fuse switch disconnector

Conductor connections:

Size	Screw connection	Clamp connection	Clamp space for flat conductor	Prism connection	Other connections
000	–	–	2.5 - 50mm² f 1.5 - 50mm² f+AE, sol(r)/s(r) fl. Cu 6 - 9mm wide terminal space 10 x 10mm	–	
00	M8 70mm²**	Cu 1.5 - 70mm² s(r), f+AE, fl. Cu 12 x (1 - 10)mm	Cu 1.5 - 70mm², f, f+AE Cu 1.5 - 70mm², sol(r), s(r) 2x10 - 25mm² f+AE, identical conductors, aligned side by side, square crimping 2x6 - 50mm² f, identical conductors, aligned side by side, fl. Cu 10 - 13mm wide terminal space 13 x 13mm	Cu, Al* 16 - 70mm² s(r), s(s), f, f+AE	tunnel terminal 3 x Cu 1.5 - 16mm² s(r), f+AE Md 3 Nm
1	M10 120mm²**	Cu 70 - 150mm² s(r), f, f+AE, fl. Cu 18 x (2 - 14)mm	Cu 70 - 185mm² f Cu 35 - 150mm² rm Cu 35 - 120mm² f+AE la. Cu 15.5 - 24mm wide Clamp space 24.5 x 12mm min. clamp space height 3mm	Cu, Al* 35 - 150mm² rm, sm, f, f+AE	double prism Cu, 2 x 35 - 70mm² s(r), s(s), f+AE 2 x 70mm² f
2	M10 240mm²**	Cu 120 - 240mm² s(r), f+AE, fl. Cu 21 x (1 - 14)mm	–	Cu, Al* 50 - 150/ 120 - 240mm² s(r), s(s), f, f+AE	double prism Cu, 2x70 - 120mm² s(r), s(s), f+AE
3	M12 2x 185mm²**	Cu 150 - 300mm² s(r), f+AE, fl. Cu 25 x (1 - 13)mm	–	Cu, Al* 150 - 300mm² s(r), s(s), f, f+AE	double prism Cu, 2x150/185mm² s(r), s(s), f+AE
4a	2xM12	–	–	–	–

* Connections with aluminium conductors are not maintenance-free (see page 8/2).
** Copper conductor for appropriate rated currents according to IEC/EN 60947-1.

Comb-type busbars and connection terminals for QUADRON®60Classic NH, size 000/00:

Recommended assembly situation: Feed with the comb-type busbar in case of NH-LTS from below: In case of differing fitting positions, reductions must be regarded.
Protection type: IP 20 frontally in connection with NH-LTS, comb-type busbars and connections terminals possible.
Protection type depends on assembly in the connection area.
Shock protection: According to EN 50274/BGV A3.
Rated operating voltage: 690V AC /440V DC.
Rated insulation voltage: 800V at contamination level 2; 690V at contamination level 3.
Rated surge withstand capacity: 6kV.
Rated surge withstand capacity: 25kA/400V.
Rated short-time withstand capacity: 12.5kA - 100ms/400V.
Size 000: connection terminal: Cu 6 - 35mm² sol(r), s(r); Cu 4 - 25 f, f+AE (max. connection diameter 11mm).
Comb-type busbar cross-section: 35mm².
Size 00: Connection terminal: Cu 25 - 95mm² sol(r), s(r); Cu 35 - 95mm² s(s) ; Cu 25 - 70mm² f+AE (quadratic or trapezoid pressed, max. connection diameter 14mm).
Rated current: supply centre 1 x 260A / 2 x 260A; supply side 1 x 130A (see table).

Rated current according to test assembly EN 60947-3 at an environment temperature of 25°C:

Assembly	Position	Ingoing feeder Comb-type busbar	Operating current	NH-fuse gL/gG	Outgoing feeder NH-LTS
Double centre feed with 95mm², 4 NH-LTS size 00, 2 x 260A with connection terminals	Exterior	–	140A	160A	70mm²
	Interior	95mm²	120A	125A/160A	70mm²
	Interior	95mm²	120A	125A/160A	70mm²
	Exterior	–	140A	160A	70mm²
Centre feed with 95mm², 3 NH-LTS size 00, 1 x 260A with connection terminals	Exterior	–	50A	63A	16mm²
	Interior	95mm²	160A	160A	70mm²
	Exterior	–	50A	63A	16mm²

The allocation of conductor cross-sections and current capacities according to national and international specifications as well as installation conditions must be regarded.

QUADRON®60Classic
NH bus-mounting switch disconnector with fuses

Panel-mounting and busbar-mounting

VDE 0660 part 107 / EN 60947-3 / IEC 60947-3
3-pole switching, double-breaking main contacts.
For NH fuse links in acc. with IEC 60269-2.
Safe, operator-independent switching, lockable in neutral position, with up to 3 padlocks.
Can be used as a mains disconnector as per IEC/EN 60204-1 (main switch).
Also as an emergency switch in combination with the red-yellow door coupling twist handle.
Additional air gap can be seen by removing the lid, including fuses.
Shock protection complies with EN 50274.
Fuse links are mechanically locked in the lid.
Front-side degree of protection IP20 as per EN 60529, degree of protection near terminal depends on installation.
Test openings in lid are self-closing.
Recommended mounting position: handle at top.

Busbar-mounting version:
Mounting on a 60mm system (size 00/1).
Screwless busbar contacting.
Gentle snapping onto busbar systems.

Panel-mounting version:
– size 00/1: to be screwed on to mounting plate

Conductor connections:

Size	Screw connection	Clamp connection	Clamp space for flat conductor	Prism connection	other connections
NH00	–	–	Cu 1.5 - 70mm², f, f+AE Cu 1.5 - 70mm², sol(r), s(r) 2 x (10 - 25)mm² f+AE, identical conductors, aligned side by side, square crimping, 2 x (6 - 50) mm² f, identical conductors, aligned side by side, fl. Cu 10 - 13mm wide terminal space 13 x 13mm	–	connection terminal Cu, 35 - 95mm² sm Cu, 25 - 70mm² f+AE Cu, 25 - 120mm² s(r)
NH1	M10 120mm²**	Cu 70 - 150mm² s(r), f, f+AE, fl. Cu 18 x (2 - 14) mm	Cu 70 - 185mm², s(r), Cu 35 - 150mm² rm Cu 35 - 120mm² f+AE la. Cu 15.5 - 24mm wide terminal space 24.5 x 21mm min. clamp space height 3mm	Cu, Al* 35 - 150mm² rm, sm, f, f+AE	double prism Cu, 2 x 35 - 70mm² rm, sm, f+AE 2 x 70mm² f

* Connections with aluminium conductors are not maintenance-free (see page 8/2).
** Copper conductor for appropriate rated currents according to IEC/EN 60947-1

QUADRON®60Classic
NH bus-mounting switch disconnector with fuses

Size	00	1
Type of current	AC (50 - 60Hz)	AC (50 - 60Hz)
	DC	
Max. rated operating voltage (U_e) **	690V AC, 440V DC	690V AC
Rated insulation voltage (U_i) **	800V	800V
Rated surge withstand capacity (U_{imp}) **	6kV	6kV
Max. rated operating current (I_e)*	125A	250A
Conditional rated short-circuit current with fuses gG	50kA size 00; 125A - 690V	50kA size 1; 250A - 690V
For NH fuse links in acc. with IEC 60269-2 with power losses per phase up to	10W	23W

* When continuously operating a number of devices next to each other, pay attention to the rated loading factor in acc. with IEC/EN 61439-2, Table 101.

** Electronic fuse monitoring 2/3 x AC 65 - 690V, DC 65 - 250V (L1, L3) (mains connections, U_{imp} 6 kV, level of soiling 3).

Pilot switch for lid position indication
1 (changeover) switch can be used
Connections by means of receptacles for tabs 2.8 x 0.5mm (e.g. DIN 46245)
Rated operating voltage (rated operating current)
250V AC (5A), 30V DC (4A)

Electronic fuse monitoring:
– No auxiliary power required, mains voltage (L1 and L3) must be present
– Test button to simulate fuse failure
– Automatic reset after fuse replacement
Green LED on: ready
Red LED on: Fuse has blown in at least one phase, no display if mains voltage not present
Output (auxiliary contacts):
– N/O / N/C, isolated, a.c. 3A/250V*, d.c. 5A/30V, d.c. 0.2A/250V*
– Conductor connection 4-pole plug up to 1.5mm² sol(r)/f/AE
Circuit diagram on page 9/25
* Level of soiling 2, excess voltage category II

Door coupling twist handle IP 66, lockable in off position, with up to 3 padlocks,
with door interlock that can be defeated.

QUADRON®60Classic
Bus-mounting switch disconnector

Panel-mounting and busbar-mounting

VDE 0660 part 107 / EN 60947-3 / IEC 60947-3
3-pole switching, double-breaking main contacts.
Operator-independent, Safe switching, lockable with 3 padlocks in OFF position.
Shock protection complies with EN 50274.
Can be used as a mains disconnector as per IEC/EN 60204-1 (main switch).
Also as an emergency switch in combination with the red-yellow door coupling twist handle.
As main switch or emergency stop switch only with the following maximum operating currents:
Design 160A: 125A/690V AC; design 320A: 280A/400 AC, 250A/690V AC.
Front-side degree of protection IP20 as per EN 60529, degree of protection near terminal depends on installation.
Recommended mounting position: handle at top.

Busbar-mounting version:
Mounting on a 60mm system (160A, 320A).
Screwless busbar contacting.
Gentle snapping onto busbar systems.

Panel-mounting version:
– (160A, 320A): to be screwed on to mounting plate.

Size	160A	320A
Type of current	AC (50 - 60Hz)	AC (50 - 60Hz)
Max. rated operating voltage (U_e)	690V AC	690V AC
Rated insulation voltage (U_i)	800V	800V
Rated surge withstand capacity (U_{imp})	8kV	8kV
Max. rated operating current (I_e)*	200A	320A
Rated short-circuit making capacity (I_{cm})	7kA (690V AC)	12kA (690V AC)
Short-circuit withstand capacity	4.5kA-1s (690V AC)	7kA (690V AC)
Conditional rated short-circuit current with series fuses gG	50kA size 00; 125A - 690V	50kA size 1; 250A - 690V

* When continuously operating a number of devices next to each other, pay attention to the rated loading factor in acc. with IEC/EN 61439-2, Table 101.

Pilot switch for lid position indication
1 (changeover) switch can be used
Connections by means of receptacles for tabs 2.8 x 0.5mm (e.g. DIN 46245)
Rated operating voltage (rated operating current)
250V AC (5A), 30V DC (4A)

Door coupling twist handle IP 66, lockable in off position, with up to 3 padlocks,
with door interlock that can be defeated.

Conductor connections:

Size	Screw connection	Clamp connection	Clamp space for flat conductor	Prism connection	Other connections
160A	–	–	Cu 1.5 - 70mm², f, f+AE Cu 1.5 - 70mm², sol(r), s(r) 2 x (10 - 25)mm² f+AE, identical conductors, side by side, square crimping, 2 x (6 - 50)mm² f, identical conductors, side by side fl. Cu 10 - 13mm wide terminal space 13 x 13mm	–	connection terminal Cu, 35 - 95mm² s(s) Cu, 25 - 70mm² f+AE Cu, 25 - 120mm² s(r)
320A	M10 185mm² 320A	Cu 70 - 150mm² s(r), f, f+AE, fl. Cu 18 x (2 - 14)mm 250A	Cu 70 - 185mm² f / 300A Cu 35 - 150mm² rm / 275A Cu 35 - 120mm² f+AE / 250A la. Cu 15.5 - 24mm wide / 300A Clamp space 24.5 x 21mm min. clamp space height 3mm	Cu, Al* 70 - 150mm² rm, sm, f, f+AE 250A	double prism Cu, 2 x 35 - 70mm² rm, sm, f+AE 2 x 70mm² f 250A

* Connections with aluminium conductors are not maintenance-free (see page 8/2).

QUADRON®60Classic
QUADRON®100Energy
NH in-line fuse switch disconnector

VDE 0660 part 107 / EN 60 947-3 / IEC 60 947-3
3-pole switching
Outgoing connection top and bottom.
Arc chamber.
For NH fuse links in acc. with IEC 60269-2 Size NH00.
Shock-protected even with lid open and in park position.
Mechanical fuse retention.
Degree of protection IP30 (front side), degree of protection near terminal depends on installation.

Connection contacts:
– M8 screw; 2x M5 clamp, 12mm clear width
– Prism clamp terminal Cu, Al* 16 - 70mm² s(r), s(s), f +AE
(* Connections with aluminium conductors are not maintenance-free (see page 8/2)

For 60mm distance between busbar centres:
– screwless busbar connection
For 100mm distance between busbar centres:
– screw-on connection to drilled busbars, screw M8
– mounting without drilling using a terminal clamp

Type	3-pole switching
Type of current	AC (50 - 60Hz)
Rated operating voltage (U_e)**	690V AC
Rated insulation voltage (U_i)**	1000V
Rated surge withstand capacity (U_{imp}) without fuse monitoring**	8kV
Rated operating current (I_e)*	160A
Utilisation categories without fuse monitoring**	AC-22B (690V) AC-23B (400V) AC-23B (500V 125A)
Conditional rated short-circuit current***	50kA
For NH fuse links in acc. with IEC 60269-2 with power losses per phase up to	12W
* When continuously operating a number of devices next to each other, pay attention to the rated loading factor in acc. with IEC/EN 61439-2, Table 101.	
** Fuse monitoring U_e, U_i 400V AC, U_{imp} 4kV, level of soiling: 2 (mains connections)	
*** Type tested with fuses of characteristic gL/gG.	

for screwing onto drilled busbars, screw M12
Pilot switch for lid position indication:
2 (changeover) switches can be used
Rated operating voltage (rated operating current) 250V AC (5A), 30V DC (4A)

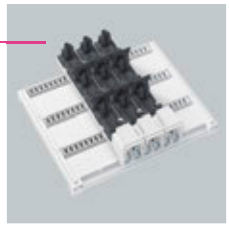
Electronic fuse monitoring:
2 LEDs
with latching properties or remote reset, programmable using
2 changeover switches
2 x Cu 2.5mm² solid conductors, DIN 46 288 or
2 x Cu 1.5mm² stranded conductors with sleeves, DIN 46 228-1/-2/-3
The internal resistance of the measuring needle lies above the MOhm level and thereby meets
VDE requirements regarding contact voltage (>1000 Ohm/V.)
To release turn off the upstream main switch.
Circuit diagram on page 9/25

QUADRON®100Energy
NH fuse block

100mm-System

3-pole
Up to 160A
Connection below and above.
Busbar contact:
– for fixing to drilled busbars, M8 screw
– undrilled assembly clamp locks

Connection contacts:
– prism connection terminals Cu, Al* 16 - 70mm² s(r), s(s), f +AE
* Connections with aluminium conductors are not maintenance-free (see page 8/2).



QUADRON®185Power
NH fuse block

185mm-System power

3-pole
For NH fuse links in acc. with IEC 60269-2 Size NH 00, 1,2,3.
For screwing onto drilled busbars.
Optional mounting on undrilled busbars.
Cable connections at bottom.
Shock protection.
Connection space covers.

Busbar contact with screws:
Screw M12.
drill – less contact with clamp bracket.
busbars (10mm thick), profile bars.
Short-circuit capability up to 50kA with fuse links gL/gG.

QUADRON®185Power
NH in-line fuse disconnectors

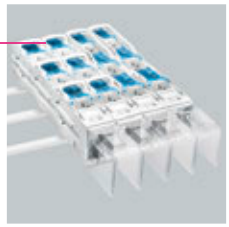
VDE 0660 Part 107 / EN 60947-3 / IEC 60947-3
1 and 3-pole switching
For NH fuse links in acc. with IEC 60269-2 Size NH 00, 1, 2, 3.
Mounting onto a 185mm system by screwing down onto drilled busbars, M 8 screw with Size 00 or M12 screw Sizes 1 - 3.
Optionally drill-free with clamp for busbars (10mm thick) and section busbars.
Turning the strip base for top or bottom cable connections.
Touch safe covers with fuse insertion guide.
Touch-safe protection even with the switch covers opened and in the parking position.
Fuse links mechanically locked in switch covers.
Degree of protection (front) IP 20, the fitting determines the protection degree at the connection.
Inspection openings in the switch covers of the self-closing type.
Terminal space cover (accessory) for additional shock protection.

Conductor terminals:

Size	Screw terminal	Direct connection terminals Cu and Al*	V-direct connection terminals Cu and Al*	Box terminal	Clamp resp. prism connection	Clamp/prism clamping space for flat copper conductor Cu
00	M8 70mm² **	–	–	1 x 1.5 - 70mm²	1 x 10 - 70mm² rm, sm, f, f+AE 1 x 95mm² rm, sm, f	12 x (1 - 10)mm
1	M12 2 x 185mm² - 240mm² **	1 x 35 - 150mm² sm 1 x 50 - 185mm² se 1 x 35 - 70mm² rm 1 x 50mm² re Md 32 - 40Nm 2 x 35 - 150mm² sm 2 x 50 - 185mm² se 2 x 35 - 70mm² rm 2 x 35 - 50mm² re Md 18 - 24Nm	1 x 70 - 240mm² sm 1 x 95 - 240mm² se		–	–
2	M12 2 x 185mm² - 240mm² **	1 x 35 - 150mm² sm 1 x 50 - 185mm² se 1 x 35 - 70mm² rm 1 x 50mm² re Md 32 - 40Nm 2 x 35 - 150mm² sm 2 x 50 - 185mm² se 2 x 35 - 70mm² rm 2 x 35 - 50mm² re Md 18 - 24Nm	1 x 70 - 240mm² sm 1 x 95 - 240mm² se		–	–
3	M12 2 x 185mm² - 240mm² **	1 x 35 - 150mm² sm 1 x 50 - 185mm² se 1 x 35 - 70mm² rm 1 x 50mm² re Md 32 - 40Nm 2 x 35 - 150mm² sm 2 x 50 - 185mm² se 2 x 35 - 70mm² rm 2 x 35 - 50mm² re Md 18 - 24Nm	1 x 120 - 400mm² rm 1 x 185 - 240mm² sm 1 x 185 - 300mm² se		–	–

* not maintenance-free when aluminium conductors are used (see page 8/2)
** copper conductor for associated rated currents in compliance with IEC/EN 60947-1

QUADRON®185Power
NH in-line fuse switch disconnectors



Size	00	1	2	3
Type of current	AC (50Hz)	AC (50Hz)	AC (50Hz)	AC (50Hz)
Rated operating voltage (U_e) **	690V AC	690V AC	690V AC	690V AC
Rated insulation voltage (U_i)**	1000V	1000V	1000V	1000V
Rated surge withstand capacity (U_{imp}) without fuse monitoring **	8kV	8kV	8kV	8kV
Rated operating current (I_e)*	160A	250A	400A	630A
Utilisation categories without fuse monitoring **	AC-22B (160A / 500V) AC-21B (125A / 690V)	AC-23B (250A / 400V) AC-22B (250A / 690V) AC-21B (250A / 690V)	AC-23B (400A / 400V) AC-22B (400A / 690V) AC-21B (400A / 690V)	AC-23B (630A / 400V) AC-22B (630A / 400V) AC-21B (630A / 400V)
Conditional rated short-circuit current, 3-pole switching ***	100kA / 500V 100kA / 690V	120kA / 500V 100kA / 690V	120kA / 500V 100kA / 690V	80kA / 500V 80kA / 690V
Conditional rated short-circuit current, 1-pole switching ***	100kA / 500V 100kA / 690V	120kA / 500V 100kA / 690V	120kA / 500V 100kA / 690V	80kA / 500V 80kA / 690V
For NH fuse links VDE 0636-2 **** with power losses per phase up to	12W	23W	34 W	48W

* When continuously operating a number of devices next to each other, pay attention to the rated loading factor in acc. with IEC/EN 61439-2, Table 101.
Keep 50mm away from the earthed parts at the top and 25mm at the side.

** Fuse monitoring U_e, U_i 400V AC, U_{imp} 4kV, VG 2 (grid connections)

*** Type verification test with fuse links Operating Class gL/gG

**** Size 1 NH fuse links deployable in Size 2 QUADRON®185Power

Size 3 as double NH-fuse breaker 1250A.
3-pole, 690V AC, 2 x 630A, 3-pole switching, rated conditional short-circuit current up to 80kA.
With fuses gL/gG, Utilisation Categories AC20B (690V).
Conductor connections: four M12 screw clamp connections each up to 240mm².

Electronic fuse monitoring:
2 LED displays
Storage property and remote reset, programmable.
2 change-over contacts.
2 x Cu 2.5mm² solid, DIN 46288 or 2 x Cu 1.5mm² flexes with sleeve, DIN 46228-1/-2/-3.
Internal resistance of the measurement paths in the MOhm range, VDE provisions in respect of contact voltage (>1000 Ohm/V) are complied with.
To isolate, switch off upstream mains switch!
Circuit diagram on page 9/25.

Signalling switch for lid positioning indication:
3 switches (change-over contacts) can be used with sizes 00, 1, 2, 3.
Rated operating voltage (rated operating current) 250V AC (5A), 30V DC (4A).