

2.4 Drop wire distribution point product range

2.4.1 High reliability drop wire connectors

Quante™ MX 2000

Description

Quante MX 2000 high reliability connection module for overhead plant

MX 2000 dropwire connectors are in use world wide to build and upgrade overhead networks with a fully watertight connection technology. When considering the fact that the highest fault rates are measured in overhead networks, it's indispensable to use a high reliable technology like MX 2000.

MX 2000 is designed to operate under harshest environmental conditions. The user friendly design prevents any possible incorrect installations.

This product is suitable for distribution, protection as well as customer termination in overhead lines. This new generation fits all existing networks and can accommodate all existing dropwire sizes, whatever the core conductor material is (copperweld, steel, bronze, copper cadmium).

No specific tools are required to perform IDC termination, a simple screw driver eases the dropwire termination. Both sides of this connector can be re-terminated multiple times with different conductor sizes.

A central disconnection area offers test facilities for both sides; multipair testing; disconnection and overvoltage protection. The overvoltage protected version is able to drain high currents up to 10kA.

The very flexible built-in protection allows to upgrade unprotected distribution points into protected ones.

The unique MX 2000 design allows to snap this modules on both IEC 715 25mm and 35mm profiles.

Earthing (10kA) is automatically completed through this mounting rail. The MX 2000 one pair module offers a very high flexibility compared to multipair systems.



Highlights:

- Watertight encapsulated contacts
- No specific termination tool needed
- for 0,4 to 1,1 mm dropwire conductors (all kinds of materials)
- Multiple re-terminations possible
- Comprehensive product range
- 10kA drain current capacity



2.4 Drop wire distribution point product range

2.4.1 High reliability drop wire connectors

Quante™ MX 2000

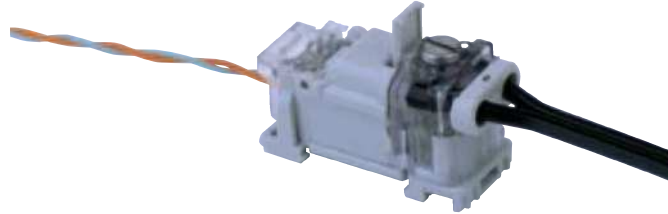
Technical characteristics

Dropwire terminations

- Screwdriver operated IDC
- Steel, copperweld, copper cadmium, bronze drop-wires
- From 0,4 to 1,1 mm conductor diameter copper wires
- Overall insulation diameter: 5 mm max.





Cable termination

- Tool free IDC
- Solid copper conductors
- From 0,4 to 0,8 mm conductor gauges
- Overall insulation diameter: 1,8 mm max.



Type/Order text

Ref.-No.

	MX 2000 C disconnection module	C249800A0000
	MX 2000 disconnection module with protection facility (delivered without protection arrester, please consult us)	C249801A0000
	MX 2000 PP protection module equipped with 250 V surge arrester with fail-safe and PTCR	C249812A0000
	MX 2000 T disconnection module with protection and test facility without interrupting the service	C249811A0000
	MX 2000 P protection module equipped with 350 V surge arrester with fail-safe	C249804A0000
	MX 2000 P protection module equipped with 250 V surge arrester with fail-safe	C249802A0000
	Three-pole surge arrester for MX 2000 250 V with fail-safe 350 V with fail-safe	C231039A0000 C231040A0000

2.4 Drop wire distribution point product range

2.4.2 Drop wire distribution points

Overview

Description

Quante MX modules for outside plant

	MX 2000 C	MX 2000	MX 2000 P	MX 2000 P 350 V
General product features				
single pair configuration	yes	yes	yes	yes
type of drop wire	all	all	all	all
mounting	clip on both DIN 35 and DIN 25	clip on both DIN 35 and DIN 25	clip on both DIN 35 and DIN 25	clip on both DIN 35 and DIN 25
retermination on dropwire side	yes	yes	yes	yes
retermination on cable side	yes	yes	yes	yes
disconnection	yes	yes	yes	yes
protection	no	upgradable	yes	yes
test	yes	yes	yes	yes
DROP WIRE				
type of termination (operation of IDC)	screwdriver	screwdriver	screwdriver	screwdriver
-> conductor diameters	0,4 -1,1 mm	0,4 -1,1 mm	0,4 -1,1 mm	0,4 -1,1 mm
-> overall insulation diameter	5 mm max	5 mm max	5 mm max	5 mm max
-> overall insulation diameter	copper, bronze, steel	copper, bronze, steel	copper, bronze steel	copper, bronze steel
number of reterminations with same drop wire	30	30	30	30
number of reterminations with different diameters (typical)	10	10	10	10
CABLE				
type of termination (operation of IDC)	tool free or screwdriver	tool free or screwdriver	tool free or screwdriver	tool free or screwdriver
-> conductor diameters	0,4 - 0,8 mm	0,4 - 0,8 mm	0,4 - 0,8 mm	0,4 - 0,8 mm
-> overall insulation diameter	1,8 mm max	1,8 mm max	1,8 mm max	1,8 mm max
-> conductor material	copper	copper	copper	copper
number of reterminations with same cable				
number of reterminations with different diameters (typical)				
Electrical features				
contact resistance	< 3mΩ	< 3mΩ		< 1mΩ
leading through resistance	< 20mΩ	< 10mΩ	< 10mΩ	< 10mΩ
insulation resistance @ 500 V	> 10 GΩ	> 10 GΩ	> 10 GΩ	> 10 GΩ
dielectric strength @ 50 Hz	5 kV RMS-50 Hz	5 kV RMS-50 Hz		
protection				
type of protection	-	upgradable	built-in	built-in
protection when line is disconnected (detent position)	-	yes	yes	yes
replaceable components	-	yes	yes	yes
static breakdown voltage	-	250 V +/-20%	250 V +/-20%	350 V +/-20%
dynamic breakdown voltage	-	< 800 V	< 800 V	< 800 V
impulse discharge current @ 8/20 μs	--	10 kA	10 kA	10 kA
alternative discharge current @ 50 Hz	-	< 10 kA	< 10 kA	< 10 kA
fail safe response time @ 5 A	-	< 10 s	< 10 s	< 10 s
test				
4 points	yes	yes	yes	yes
test probe	crocodile clamps	crocodile clamps	crocodile clamps	crocodile clamps
multipair test (2)	yes	yes	yes	yes
design features				
plastic materials	polycarbonate	polycarbonate	polycarbonate	polycarbonate
contact material	CuSn9P	CuSn9P	CuSn9P	CuSn9P
contact coating	tin/lead 60/40	tin/lead 60/40	tin/lead 60/40	tin/lead 60/40
self-extinguishing plastic material class	UL 94 V0	UL 94 V0	UL 94 V0	UL 94 V0
colour	clear plastic and grey	clear plastic and grey	clear plastic and grey	clear plastic and grey
watertightness				
self-healing feature	yes	yes	yes	yes
working conditions				
immersion test under 48 V	yes	yes	yes	yes
working temperatures	-30 to + 200°C	-30 to + 200°C	-30 to + 200°C	-30 to + 200°C



2.4 Drop wire distribution point product range

2.4.2 Drop wire distribution points

Overview

Description

Range of outdoor boxes for outside plant

	3M™ BMX	3M™ BDx3000	3M™ ATS 2000**	3M™ EDB
Applications				
application	dropwire distribution and protection box	multipurpose	dropwire distribution and protection box	Multipair IDC block distribution box
possible internal equipment capacities	MX 2000* or classic 10, 20, 30, 50 pairs	MX*, SID*, STS*, MX2000*, STG2000*	MX 2000* 1, 5, 10, 20, 30pairs	SID-C, Slic™ QCS, QSA, SID-CT, STG2000K
Product features				
pole mounting	mounting bracket or steel band	mounting bracket	no bracket, screw or steel band	No bracket, with screws
wall mounting	with or without bracket	without bracket	without bracket	No bracket, with screws
type of cover	10 pairs:hinged others:sliding cover	hinged	hinged	hinged
type of box	5 types	6 types	4 types	1 type
type of lock	optional lock with key	optional lock with key	snap lock	screw
cable ties	yes	optional	no	no
cable routing devices	yes	optional	no	no
Technical features				
type of material	10 pairs: PVC 20, 30,50 pairs: polyester re-Inforced fibre glass	PVC	polycarbonate	Fiber reinforced polycarbonate
UV resistance	yes	yes	yes	yes
colour	light grey	light/dark grey	light grey	light grey
standard water tightness (NF EN 50529)	10 pairs hinged IP 44 Other IP 43	IP 55	IP 54	IP 54
mechanical resistance (NFC 20015)	10 pairs: IK 08 others: IK 10	IK 07	IK 07	IK 07
self-extinguishible material (UL 94)	UL94 V0	V0	V0	V0
temperature range	-25°to +70°C	-25°to +70°C	-25° to +70°C	-25° to +70°C
Outside dimensions (w x h x d) in mm				
-> size 1 hinged	240 x 270 x 80	255 x 292 x 86	41 x 95 x 67	116 x 230 x 95
-> size 2	240 x 320 x 73	255 x 292 x 116	204 x 248 x 71	
-> size 3	240 x 511 x 73	255 x 292 x 156	204 x 372 x 71	
-> size 4	240 x 856 x 73	255 x 400 x 86	204 x 422 x 71	
-> size 5 sliding	240 x 213 x 73	255 x 400 x 116		
-> size 6	-	255 x 400 x 156		

** Values should be reconfirmed

* These products are trademarked by Quante.

2.4 Distribution point product range

2.4.2 Drop wire distribution points

3M™ BMX

Description

3M BMX 10-50 pair distribution box

Application

The boxes in the BMX range are used for connecting and protecting subscriber lines and terminals. Developed to accommodate the MX connection modules, they guarantee the operator reliable and consistent connection assemblies.

Numerous configuration are possible:

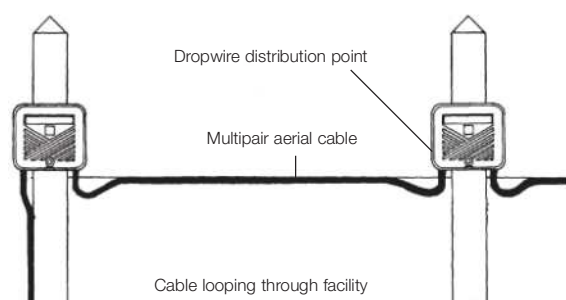
- 4 box sizes for distribution and secondary cross connection applications
- hinged lid available (10 pair only)
- standard sizes from 10 to 50 pairs
- connection modules can be installed when required.

Easy to assemble:

- rubber 'press-out' cable entries
- equipped with cable routing devices.

Simple to operate and maintain:

- boxes are compatible with all types of supports
- modular connections starting from one pair
- MX module insulation displacement contact reduces cabling time
- total reliability due to watertight connections
- high capacity boxes are aimed to be used as transition point between underground and overhead networks. It is recommended to offer a protection at this point in the network as electronic devices can be installed in the network. For these applications BMX boxes are made of glass fibre reinforced polyester to withstand specific conditions due to the location at the top of the pole.
- In the 10 pair box, multipair cable can 'loop through' the box with only the 10 distributed pairs required taped out. As a result, one 50 pair cable can feed 5 distribution boxes without using any additional overhead joint closure.



Highlights:

- Comprehensive range
- Enhanced weather-proofing
- Insect proof
- Automatic lid closure
- Swivelling cover (10 pairs)
- Protection of the incoming cables
- Accommodate all types of MX modules
- Glass fibre reinforced polyester for large capacities

Box dimensions overall in mm

Model	10 pairs	10 pairs	20 pairs	30 pairs	50 pairs	100 pairs**
Width	240	240	240	240	240	240
Height	270	213	320	511	856	856
Depth	80	73	73	73	73	73
Cover	swivelling	sliding	sliding	sliding	sliding	sliding

** The 100 pair configurations are achieved by assembling two 50 pair boxes.

2.4 Distribution point product range

2.4.2 Drop wire distribution points

3M™ BMX

3M



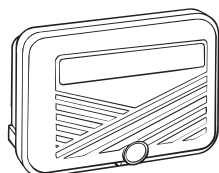
Solutions for Outside Plant

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Type/Order text

Ref.-No.

Distribution/protection boxes



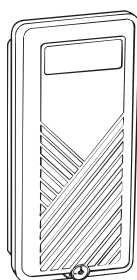
These 2 boxes can not be mounted directly with stainless steel 7/10 bracket

10 pair box with swivelling cover, equipped with 10 MX 2000 P 250 V

N501186A0000

10 pair empty box with swivelling cover, rail and earth post

N501187A0000



These boxes can be pole mounted directly with stainless steel 7/10 bracket

Simple mounting 2 points bracket
for pole mounting (Mexico type)

C231599A0000

Mounting bracket with 4 fixing points
for pole mounting

N801161A0000

10 pair empty box with sliding cover, rail and earth post
(MX classic)

NN3450600000

Mounting bracket (France Telecom)

NN8809590000

20 pair empty box with sliding cover, rail and earth post
(MX classic)
(MX 2000)

NN3450610000

N451054A0000

Mounting frame
(20 pair)

NN7803400000

30 pair empty box with sliding
(MX classic)
(MX 2000)

NN3450620000

N451055A0000

Mounting frame
(28/30 pair)

NN7803410000

50 pair empty box with sliding cover, rail and earth post
(MX classic)
(MX 2000)

NN3450630000

N451056A0000

Mounting frame
(50/56 pair)

NN7803420000

Treated steel 7/10 bracket, height 20 mm, 50 meters long

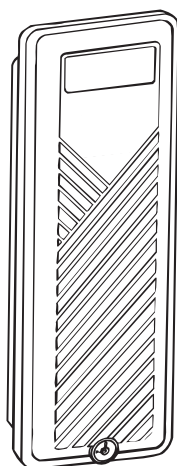
NN9019630000

Stainless steel fixing part for treated bracket / (100 pieces)

NN2650540000

Key lock kit

N691009A0000



2.4 Distribution point product range

2.4.2 Drop wire distribution points

3M™ ATS 2000, 3M™ EDB

Description

3M ATS2000 boxes are suitable for accommodating the "Pair-at-a-time" sealed Insulation Displacement Connector (IDC) service wire and drop wire termination blocks (MX 2000).

ATS2000 boxes are available in 4 standard sizes. 1 pair (both used for 5 pair), 20 pair and 30 pair. The 30 pair box can be used for accommodating 25 pairs IDC modules, too.

ATS boxes are supplied with DIN 35 rails and all the necessary parts to mount the IDC modules. Boxes are supplied without the IDC modules.



Type/Order text

Ref.-No.

Description	Packaging	Minimum Order
1 pair box w/o module	1 each /box, 100/case	10ea (1 cs)
5 pair box w/o module	1 ea/box, 10ea/cs	10ea (1 cs)
10 pair box w/o module	1 ea/box, 10ea/cs	10ea (1 cs)
20 pair box w/o module	1 ea/box, 10ea/cs	10ea (1 cs)
30 pair box w/o module	1 ea/box, 10ea/cs	10ea (1 cs)

ATS 2001

ATS 2005

ATS 2010

ATS 2020

ATS 2030

Description

EDB box is made of UV resistant fiber glass reinforced polycarbonate for outdoor/indoor 10/20 pair distribution point applications. Protection class is IP55. Box consists of 2 main injection molded parts, base and lid.

Designed with the necessary depth to accommodate the IDC modules with the protection magazine. Lid is attached to the base with a hinge mechanism at the top. Two main parts are sealed together by means of a rubber gasket fixed at the edge of the lid and locked through a (-) head screw that is supplied on the box. When the lid is open, it is kept in position by the holder attachment part of the lid and base.

One size, compact box for Outside Plant distribution point applications.

Accommodates 1 or 2 each 10 pairs IDC block types SID-C, QSA+, STG2000K and Slic QCS.

Designed to accept modules with protection magazines (where applicable).



Type/Order text

Ref.-No.

Description	Packaging	Minimum Order
1 box w/o module	1 each/box, 20 each/carton	20 each (1 carton)

Please consult us