e. info@tercel.com.au w. tercel.com.au

Tercel International is an authorised distributor for the ABB Furse range in Australia

PRODUCT SHORTFORM

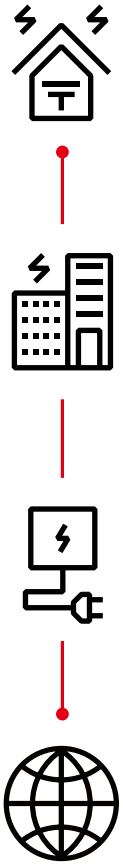
Furse® Earthing & Lightning Protection

APAC solutions overview

Furse® Earthing & Lightning Protection provides a complete solution for safeguarding against lightning risk. From our own designed and manufactured products, through to risk assessment and systems design advice, Furse offers a renowned total solution for earthing and lightning protection.

Furse® Earthing & Lightning Protection

Our reach & expertise



Furse® Earthing & Lightning Protection is part of ABB's Installation Products division. With a heritage of over 130 years, the Furse® brand is synonymous with earthing and lightning protection, and is recognised worldwide for its Total Solution.

The **Furse Total Solution** incorporates all customer needs for earthing & lightning protection, including:

- Structural lightning protection systems
- Earthing for lightning protection, power and telecommunications systems
- Transient overvoltage protection
- Customer project consultations, technical guidance and system design

The Total Solution delivers the most complete and effective protection against lightning and earth fault current risk, both safeguarding life and ensuring continuous, normal operation of electrical and electronic systems.

Compliant to the following standards:

- IEC BS 62305
- IEC BS 62561
- AS1768 (Australia & New Zealand)
- SS 555 (Singapore)

Why choose Furse products and services?
Being an integral part of ABB reinforces our commitment to quality, service and to providing solutions which deliver safety and protection of people, structures and electrical services within the built environment.

Furse products and services aim to deliver customer value in key areas:

- **Reliability & ease of installation**
  Furse products are manufactured from high quality materials within an ISO 9001 environment, to ensure long lasting performance, and are designed for easiest possible installation
- **Convenience & support**
  Furse products are readily available through our distributors worldwide, and our sales are supported both locally and globally by technical guidance and support
- **Expertise & experience**
  Our time served technical engineers provide specific advice on customers' earthing and lightning protection concerns, and can provide drawings and system designs to any recognised standard.

Conductors

Bare conductors, tinned & PVC covered conductors

Bare copper tape

Part no.	Conductor size (mm)
TC030/50	25 x 3
TC030/50-AP	25 x 3
TC030-UL	1" x 1/8"
TC035	25 x 4
TC040	25 x 6
TC043-FU	30 x 5
TC065	38 x 6
TC068	40 x 6
TC070	50 x 3
TC075	50 x 4
TC078	50 x 5
TC080	50 x 6
TC080-AP	50 x 6

*Certification / Standards: UL 96. Part numbers with UL suffix only.

Tinned copper tape

Part no.	Conductor size (mm)
TC230	25 x 3
TC230-UL	1" x 1/8"
TC240	25 x 6
TC280	50 x 6

*Certification / Standards: UL 96. Part numbers with UL suffix only.

Bare aluminium tape

Part no.	Conductor size (mm)
TA030	25 x 3
TA040	30 x 3
TA042	25 x 6

PVC covered copper tape

Part no.	Conductor size (mm)	Colour range
TC105-FU	25 x 3	Black
TC110	25 x 3	Green
TC115-FU	25 x 3	Grey
TC116-FU	25 x 3	Dark grey
TC120-FU	25 x 3	Stone
TC125-FU	25 x 3	White
TC130	25 x 3	Brown
TC140-FU	25 x 6	Green

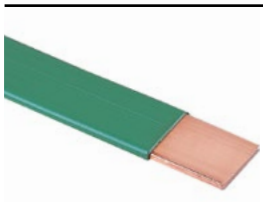
PVC covered aluminium tape

Part no.	Conductor size (mm)	Colour range
TA105	25 x 3	Black
TA110	25 x 3	Green
TA115	25 x 3	Grey
TA120	25 x 3	Stone
TA125	25 x 3	White
TA130	25 x 3	Brown

Green & yellow PVC covered copper tape

Part no.	Conductor size (mm)
TC111-FU	25 x 3
TC111/50	25 x 3

Green LSOH covered copper tape



Part no.	Conductor size (mm)
TC910	25 x 3
TC910/50	25 x 3

Air termination

Air terminals, bases, brackets & couplings

Air rod

Part no.	Rod length (mm)	Rod diameter (mm)	Thread size	Conductor material
RA215*	500	Ø 15	M16	Copper
RA215-600	600	Ø 15	M16	Copper
RA225*	1,000	Ø 15	M16	Copper
RA230	1,500	Ø 15	M16	Copper
RA240	2,000	Ø 15	M16	Copper
RA250-FU	3,000	Ø 15	M16	Copper
RA015	500	Ø 15	M16	Aluminium
RA025	1,000	Ø 15	M16	Aluminium
RA030	1,500	Ø 15	M16	Aluminium
RA040	2,000	Ø 15	M16	Aluminium
RA050	3,000	Ø 15	M16	Aluminium

*Certification / Standards: UL 96.

Air rod base

Part no.	Air rod diameter (mm)	Max. conductor width (mm)	Conductor material
SD105-H*	Ø 15	25	Copper
SD003-H	Ø 15	25	Aluminium
SD120	Ø 15	50	Copper

*Certification / Standards: UL 96.

Multiple point

Part no.	Rod diameter (mm)	Rod material
RA600	Ø 15	Copper
RA500	Ø 15	Aluminium

Flat saddle

Part no.	Rod diameter (mm)	Conductor diameter (mm²)	Conductor material
SD155	Ø 15	50	Copper
SD160	Ø 15	70	Copper
SD165	Ø 15	95	Copper

Rod to conductor coupling

Part no.	Rod diameter (mm)	Rod material
For use with flat tape conductor		
CG600	Ø 15	Copper
CG500	Ø 15	Aluminium
For use with stranded conductor		
CG705	Ø 15	Copper

Rod brackets

Part no.	Rod diameter (mm)	Rod material
BR105	Ø 15	Copper
BR005	Ø 15	Aluminium

Air rod base for trapezoidal roofs

Part no.	Conductor size (mm)	Material
TZ405	25 x 3 mm / Ø 8	Copper
TZ407	25 x 3 mm / Ø 8	Aluminium

Ridge saddle

Part no.	Rod diameter (mm)	Max conductor width (mm)	Conductor material
SD015	Ø 15	31	Aluminium
SD115	Ø 15	31	Copper

Air termination

Strike pad & free-standing air termination

Strike pad

Part no.	Conductor material
PL010	Copper
PL005	Aluminium
Accessories	
SM005	Copper stem for use with PL010

Free-standing interception pole

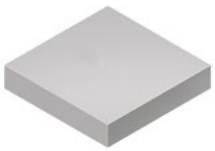
Part no.	Pole height (m)	Pole diameter (mm)	Pole make up
912000-FU	3	Ø 10-42	2 piece
912001-FU	3.5	Ø 10-42	2 piece
912002-FU	4	Ø 10-42	2 piece
912003-FU	4.5	Ø 10-42	2 piece
912004-FU	5	Ø 10-42	2 piece
912005-FU	5.5	Ø 10-42	2 piece
912006-FU	6	Ø 16-60	3 piece
912007-FU	6.5	Ø 10-60	3 piece
912008-FU	7	Ø 16-60	3 piece
912009-FU	7.5	Ø 10-60	3 piece
912010-FU	8	Ø 16-60	3 piece
912011-FU	9	Ø 10-60	3 piece
912013-FU	10	Ø 10-60	3 piece

Free-standing interception pole base frame

Part no.	Frame type	Dimension (mm)
499000-FU	Square base	650 x 650
499005-FU	Tripod base	1350 x 1350
499006-FU	Tripod base	1850 x 1850
499007-FU	H shaped base	1850 x 1850

Dimensions are approximate and include concrete base dimensions.

Free-standing interception pole base



Part no.	Description	Weight each (kg)
499100-FU	Square concrete base 300 x 300 x 60 mm	12
499101-FU	Square concrete base 300 x 300 x 80 mm	16
103103-FU	Circular concrete base with M16 insert	12
103101-FU	Circular concrete base with M16 insert	16
103110-FU	Circular concrete base with M16 insert	20
103118-FU	Circular concrete base with M16 insert	25

Conductor network

Conductor clips

Tape clip

Part no.	Conductor width (mm)	Conductor thickness (mm)
For use with bare copper		
CP205	20	3
CP210	25	3-4
CP220	25	5-6
CP230	30-32	3-4
CP235	30-32	5-6.5
CP240	38-40	3-4
CP245	38-40	5-6.5
CP255	50	3-4
CP260	50	5-6.5
For use with PVC covered copper		
CP215	25	3-4
CP225	25	6
CP265	50	6
For use with lead covered copper		
CP305	25	3
For use with bare aluminium		
CP105	20	3
CP110	25	3-4
CP125	50	6
For use with PVC covered aluminium		
CP115	25	3
CP130	50	6

Pressed tape clip

Part no.	Conductor size (mm)
For use with bare copper	
CP510	20 x 3
CP515	25 x 3
For use with bare aluminium	
CP405	20 x 3
CP410	25 x 3
CP415	25 x 6
For use with PVC covered tape	
CP517	25 x 3

One hole cable clip

Part no.	Conductor size (mm)	Conductor material
For use with stranded conductor		
CP910	50 mm²	Copper
CP915	70 mm²	Copper
CP920	95 mm²	Copper

Heavy duty cast cable saddle

Part no.	Conductor size (mm)	Conductor material
For use with stranded conductor		
CP810	50 mm²	Copper
CP815	70 mm²	Copper
CP835	95 mm²	Copper
CP840	120 mm²	Copper

*PVC covered Ø8 mm conductor.

Non-metallic tape clip

Part no.	Conductor size (mm)	Colour
For use with bare tape		
CP005	20 x 3	Brown
CP010	20 x 3	Grey
CP015	25 x 3	Brown
CP020	25 x 3	Grey
CP065	50 x 6	Brown
For use with PVC covered tape		
CP025	25 x 3	Brown
CP030	25 x 3	Black
CP033	25 x 3	Dark grey
CP035	25 x 3	Green
CP040	25 x 3	Grey
CP045	25 x 3	Stone
CP050	25 x 3	White

Glue down tape clip

Part no.	Conductor size (mm)	Colour
For use with bare tape		
GD015	25 x 3	Brown
GD020	25 x 3	Grey
For use with PVC covered tape		
GD025	25 x 3	Brown
GD030	25 x 3	Black
GD040	25 x 3	Grey
GD045	25 x 3	Stone
GD050	25 x 3	White

Conductor network

Conductor clips & accessories

Self adhesive tape clip

Part no.	Conductor size (mm)	Colour
For use with bare tape		
CA015-FU	25 x 3	Brown
CA020-FU	25 x 3	Grey
For use with PVC covered tape		
CA025-FU	25 x 3	Brown
CA030-FU	25 x 3	Black
CA040-FU	25 x 3	Grey
CA045-FU	25 x 3	Stone
CA050-FU	25 x 3	White

Solvent weldable tape clip

Part no.	Conductor size (mm)	Colour
For use with bare tape		
CW015-FU	25 x 3	Brown
CW020-FU	25 x 3	Grey
For use with PVC covered tape		
CW025-FU	25 x 3	Brown
CW030-FU	25 x 3	Black
CW040-FU	25 x 3	Grey
CW045-FU	25 x 3	Stone
CW050-FU	25 x 3	White

Clips for solid circular conductor available to order.

Heat weldable clip for PVC roofing

Part no.	Conductor size (mm)	Colour
For use with bare tape		
HW015-FU	25 x 3	Brown
HW020-FU	25 x 3	Grey
For use with PVC covered tape		
HW025-FU	25 x 3	Brown
HW030-FU	25 x 3	Black
HW040-FU	25 x 3	Grey
HW045-FU	25 x 3	Stone
HW050-FU	25 x 3	White

Clips for solid circular conductor available to special order.

Heat weldable clip for TPO/FPO roofing

Part no.	Conductor size (mm)	Colour
For use with bare tape		
HW315	25 x 3	Brown
HW320	25 x 3	Grey
For use with PVC covered tape		
HW325	25 x 3	Brown
HW330	25 x 3	Black
HW340	25 x 3	Grey
HW345	25 x 3	Stone
HW350	25 x 3	White

Clips for solid circular conductor available to special order.

Heat weldable clip for polyethylene roofing

Part no.	Conductor size (mm)	Colour
For use with bare tape		
HW415	25 x 3	Brown
HW420	25 x 3	Grey
For use with PVC covered tape		
HW425	25 x 3	Brown
HW430	25 x 3	Black
HW440	25 x 3	Grey
HW445	25 x 3	Stone
HW450	25 x 3	White

Clips for solid circular conductor available to special order.

Non-metallic clip accessories

Part no.	Description
CW905	Universal welding solvent - 500 ml
CW999	Cleaning solution - 500 ml
CA900	Surface primer - 250 ml
DT100	For use with adhesive and weldable tape clips

Bitumen felt roof clip

Part no.	Conductor size (mm)	Colour	Felt colour
For use with bare tape			
FP015	25 x 3	Brown	
FP020	25 x 3	Grey	
For use with PVC covered tape			
FP025	25 x 3	Brown	
FP030	25 x 3	Black	
FP040	25 x 3	Grey	
FP045	25 x 3	Stone	
FP050	25 x 3	White	

Shade of coloured felt may vary.

Conductor network

Circular standing seam holdfasts, trapezoidal holdfasts and conductor clamps

Air rod base

Part no.	Material
SC2405	25 x 3 mm bare copper tape Ø 8 mm bare copper solid circular conductor
SC2407	25 x 3 mm bare aluminium tape Ø 8 mm bare aluminium solid circular conductor

Conductor fasteners for tape

Part no.	Conductor size (mm)	Material
SC2210	25 x 3	Copper
SC2110	25 x 3	Aluminium

Junction clamps for tape

Part no.	Conductor size (mm)	Material
SC2105	25 x 3	Copper
SC2005	25 x 3	Aluminium

Junction clamps for tape

Part no.	Conductor
TZ105	25 x 3 mm bare copper tape
TZ005	25 x 3 mm bare aluminium tape

Conductor fasteners for tape

Part no.	Conductor
TZ210	25 x 3 mm bare copper tape
TZ110	25 x 3 mm bare aluminium tape
TZ040	25 x 3 mm grey PVC covered tape

Square tape clamp

Part no	Conductor size (mm)	Conductor material
CT105-H	25 x 3	Copper
CT110-H	25 x 6	Copper
CT115-H	50 x 6	Copper
CT005-H	25 x 3	Aluminium
CT010	25 x 6	Aluminium

*Certification / Standards: UL 96 (all parts except CT010).

Test / Junction clamp

Part no.	Conductor size (mm)	Conductor material
CN105-H*	26 x 8	Copper
CN005	26 x 8	Aluminium

*Certification / Standards: UL 96.

Plate type test clamp

Part no.	Conductor size (mm)	Conductor material
CT405	26 x 12 max	Copper

Stainless steel bimetallic connector

Part no.	Conductor size (mm)	Conductor size (mm)
CN810-FU	25 x 3	25 x 3
CN815-FU	8 dia.	8 dia.
CN820-FU	8 dia.	25 x 3

Earth electrodes

Earth rods, seal & inspection pits

Threaded copperbond earth rod

Part no.	Nominal diameter (in)	Length (mm)
RB205-FU	Ø ⅝	1,200
RB210	Ø ⅝	1,500
RB215	Ø ⅝	1,800
RB220-FU	Ø ⅝	2,100
RB225	Ø ⅝	2,400
RB225-UL	Ø ⅝	2,400
RB235	Ø ⅝	3,000
RB235-UL	Ø ⅝	3,000
RB305	Ø ¾	1,200
RB310	Ø ¾	1,500
RB315	Ø ¾	1,800
RB320-FU	Ø ¾	2,100
RB325	Ø ¾	2,400
RB325-UL	Ø ¾	2,400
RB335	Ø ¾	3,000
RB335-UL	Ø ¾	3,000

*Certification / Standards: UL 96. Part numbers with UL suffix only.

Fittings (threaded)

Part no.	Type
CG170	½" Coupling
CG270	⅝" Coupling
CG370	¾" Coupling
ST100	½" Driving stud
ST200	⅝" Driving stud
ST300	¾" Driving stud

Earth rod seal

Part no.	Type
Earth rod seal assembly	
ES300	Earth rod seal and membrane seal
Earth rod seal pack	
ES300-12	Seal pack for ½" (Ø 12.7 mm) Copperbond rod
ES300-58	Seal pack for ⅝" (Ø 14.2 mm) Copperbond rod
ES300-34	Seal pack for ¾" (Ø 17.2 mm) Copperbond rod
ES300-15	Seal pack for Ø 15 mm solid copper rod
ES300-16	Seal pack for Ø 16 mm stainless steel rod
ES300-20	Seal pack for Ø 20 mm solid copper rod
Earth rod seal tube	
ES310-03	Seal tube, 300 mm length
ES310-05	Seal tube, 500 mm length
ES310-10	Seal tube, 1,000 mm length
ES310-15	Seal tube, 1,500 mm length
ES310-20	Seal tube, 2,000 mm length
ES310-30	Seal tube, 3,000 mm length
Accessory spanner set	
ES320	Membrane seal torque spanner set

Solid copper and stainless steel earth rod

Part no.	Diameter (mm)	Length (mm)
Solid copper rod		
RC010	Ø 15	1,200
RC011	Ø 15	1,500
RC012	Ø 15	3,000
RC015	Ø 20	1,200
RC016	Ø 20	1,500
RC017	Ø 20	3,000
Stainless steel rod		
RS005	Ø 16	1,200
RS011	Ø 16	1,500
RS012	Ø 16	3,000
RS015	Ø 20	1,200
RS016	Ø 20	1,500
RS017	Ø 20	3,000
Fittings		**Type**
ST010		15 mm hardened steel driving stud for copper/stainless steel rod
ST015		20 mm hardened steel driving stud for copper/stainless steel rod
CG013		Coupling dowel for 15 mm & 20 mm copper rod
CG005		Coupling dowel for 16 mm & 20 mm stainless steel rod
SP010-FU		15 mm hardened steel spike for copper/stainless steel rod
SP015-FU		20 mm hardened steel spike for copper/stainless steel rod

FurseCEM® conductive aggregate / Bentonite moisture retaining clay

Part no.	Description
CM035	FurseCEM®
CM040	FurseCEM® Premix*
CM015	Bentonite powder 25kg
CM020	Bentonite granules 25kg

*Conductive earthing mix supplied with cement

Inspection pit

Lightweight inspection pit

Concrete earth inspection pit

Part no.	Description
PT205	Lightweight inspection pit with grey polymer lid
PT004	5 hole earth bar
Accessories for polymer lid	
AK005	6 mm Allen key
Accessories for concrete lid	
JH100	M8 x 100 mm long mild steel 'J' bolt lifting hook
AS100	M8 x 60 stainless steel Allen caphead screw (2 per lid)
PT005	Concrete earth inspection pit
PT006	5 hole earth bar
PT007	7 hole earth bar

Earth bonds & clamps

Mechanical clamps, earth boss, bonds & clamps

Rod to tape clamp (type A)

Part no.	Nominal rod diameter (in)	Nominal rod diameter (mm)	Max. conductor (mm)
CR105	Ø ½	Ø 12.7	26 x 12
	Ø ½	Ø 16	26 x 12
	Ø ¾	Ø 20	26 x 10
CR108	Ø ⅝	Ø 16	30 x 2
	Ø ¾	Ø 20	30 x 2
CR110	Ø ⅝	Ø 16	40 x 12
CR115	Ø ⅝	Ø 16	51 x 8
CR125	Ø ¾	Ø 20	51 x 12
CR130	Ø ½	Ø 12.7	26 x 20
	Ø ⅝	Ø 16	26 x 18
	Ø ¾	Ø 20	26 x 10
	Ø 1	Ø 25	26 x 10

Rod to cable clamp (type G)

Part no.	Nominal rod diameter (in)	Nominal rod diameter (mm²)	Max. conductor (mm²)
CR505	Ø ⅜	Ø 9.5	6-35
CR510-FU	Ø ½	Ø 12.7	16-50
CR515	Ø ⅝	Ø 16	16-70
CR520	Ø ¾	Ø 20	35-95

'U' bolt rod clamp (type E)

Part no.	Nominal rod/rebar diameter (mm)	Tape width (mm)
CR305	Ø 14 - 25	–
CR320	Ø 14 - 25	25
CR325	Ø 26 - 40	–
CR326	Ø 26 - 40	25
CR330	Ø 41 - 50	–

'U' bolt rod clamp (type GUV)

Part no.	Nominal rod/rebar diameter (mm)	Conductor range (mm²)
CR700	Ø 12 - 20	16-70
CR705	Ø 12 - 20	70-150
CR710	Ø 25	16-70
CR730	Ø 12 - 27	185-300
CR740	Ø 25	70-150
CR750	Ø 25	150-300

Rebar to rebar connecting clip

Part no.	Rebar diameter A (mm)	Rebar diameter B (mm)
RR812	Ø 8	Ø 12
RR1616	Ø 16	Ø 16
RR2121	Ø 20	Ø 20
RR2626	Ø 25	Ø 25
RR3232	Ø 32	Ø 32
RR3838	Ø 40	Ø 40

Earth boss

Part no.	Length (mm)	Diameter (mm)	Thread size (mm)
EB0111	30	Ø 30	M10
EB0111-SS	30	Ø 30	M10
EB1111	30	Ø 30	M10
EB1111-SS	30	Ø 30	M10
EB0121	30	Ø 40	M10
EB1121	30	Ø 40	M10
EB0121-SS	30	Ø 40	M10
EB1121-SS	30	Ø 40	M10
EB0221	40	Ø 40	M10
EB1221	40	Ø 40	M10
EB0221-SS	40	Ø 40	M10
EB1221-SS	40	Ø 40	M10
EB0321	50	Ø 40	M10
EB1321	50	Ø 40	M10
EB0321-SS	50	Ø 40	M10
EB1321-SS	50	Ø 40	M10
EB001	50	Ø 50	M10
EB1331	50	Ø 50	M10
EB001-SS	50	Ø 50	M10
EB1331-SS	50	Ø 50	M10

Standard earth bosses include phosphor bronze fixings.
Earth boss part no.s ending '-SS' include stainless steel fixings.

B bond

Part no.	Max tape width (mm)	Conductor material
BN105	26	Copper
BN005	26	Aluminium

Earth bonds & clamps

Earth points & splitbolt connector

Single hole earth point

Part no.	Description
EP100	Single hole earth point with M8 hole
EP101	Single hole earth point with M10 hole
EP102	Single hole earth point with M12 hole
Single hole earth point with single pre-welded tail	
EP105	EP100 earth point with pre-welded 500 mm earth cable
EP106	EP101 earth point with pre-welded 500 mm earth cable
EP107	EP102 earth point with pre-welded 500 mm earth cable

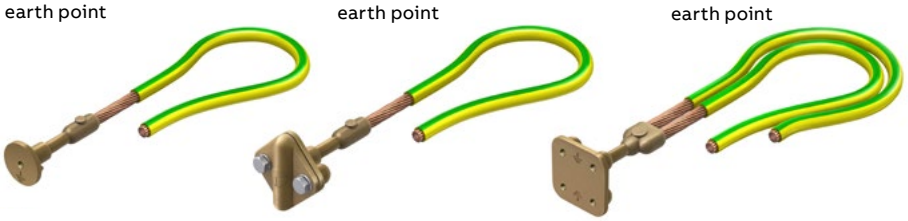
Two hole earth point

Part no.	Description
EP115	Supplied c/w front plate for connection of 25 mm x 3 mm copper tape or 70 mm² stranded copper cable
EP120	Supplied c/w front plate for connection of 25 mm x 3 mm copper tape or 8 mm Ø solid circular copper
EP125	Supplied without front plate
Two hole earth point with single pre-welded tail	
EP116	EP115 earth point with pre-welded 500 mm earth cable
EP121	EP120 earth point with pre-welded 500 mm earth cable
EP126	EP125 earth point with pre-welded 500 mm earth cable
Two hole earth point with double pre-welded tail	
EP216	EP115 earth point with pre-welded 2 x 500 mm earth cable
EP221	EP120 earth point with pre-welded 2 x 500 mm earth cable

Single hole
earth point

Two hole
earth point

Four hole
earth point



Four hole earth point

Part no.	Description	Hole size (mm)
EP110	Earth point only	M8 x 12
Four hole earth point with single pre-welded tail		
EP111	EP110 earth point with pre-welded 500 mm earth cable	
Four hole earth point with double pre-welded tail		
EP211	EP110 earth point with pre-welded 2 x 500 mm earth cable	

Type H high strength splitbolt connector

	Conductor range (mm²)			
	Main min	Main max	Tap min	Tap max
8H-FU	4	10	2.5	10
4H-FU	10	16	2.5	16
2H-FU	16	25	4	25
1H-FU	25	35	4	35
10H-FU	35	50	4	50
20H-FU	35	70	4	70
30H-FU	50	95	4	95
40H-FU	50	120	6	120
350M-FU	95	185	6	185

Pipe bond

Part no.	Conductor diameter (mm)	Pipe diameter (mm)	Conductor material
BN175	Ø 8	Ø 50-200	Copper

Flexible flat copper braid

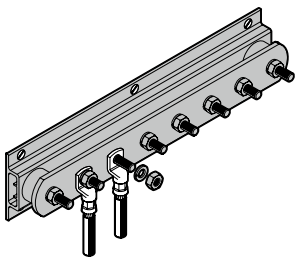
Part no.	Overall braid dimensions (mm)	Length (mm)	Hole diameter (mm)
BN505	25 x 3.5	200	Ø 11
BN510	25 x 3.5	400	Ø 11
Tinned copper braid			
BN505-T	25 x 3.5	200	Ø 11
BN510-T	25 x 3.5	400	Ø 11

Earth bars

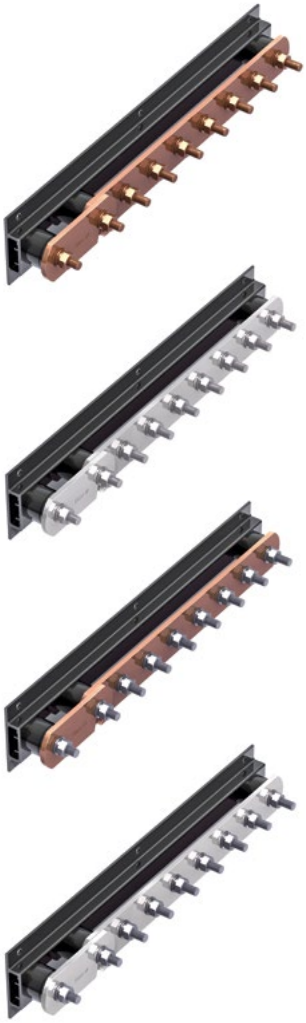
Earth bar & earth bar with single disconnecting link

Earth bar

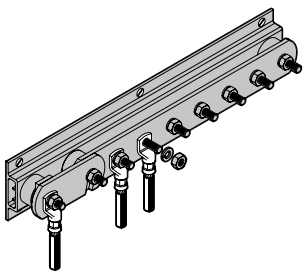
Part no.	Description	Length (mm)
Copper earth bar		
LK245-6	6 way	400
LK245-8	8 way	500
LK245-10	10 way	650
LK245-12	12 way	750
LK245-14	14 way	850
LK245-16	16 way	950
LK245-18	18 way	1,050
LK245-20	20 way	1,200
LK245-22	22 way	1,300
LK245-24	24 way	1,400
LK245-26	26 way	1,500
LK245-28	28 way	1,650
LK245-30	30 way	1,750
Tinned copper earth bar		
LK245-6-T	6 way	400
LK245-8-T	8 way	500
LK245-10-T	10 way	650
LK245-12-T	12 way	750
LK245-14-T	14 way	850
LK245-16-T	16 way	950
LK245-18-T	18 way	1,050
LK245-20-T	20 way	1,200
LK245-22-T	22 way	1,300
LK245-24-T	24 way	1,400
LK245-26-T	26 way	1,500
LK245-28-T	28 way	1,650
LK245-30-T	30 way	1,750
Earth Bar with stainless steel fixings		
Copper earth bar		
LK245-6SS	6 way	400
LK245-8SS	8 way	500
LK245-10SS	10 way	650
LK245-12SS	12 way	750
Tinned copper earth bar		
LK245-6TSS	6 way	400
LK245-8TSS	8 way	500
LK245-10TSS	10 way	650
LK245-12TSS	12 way	750



Earth bar with single disconnecting link



Part no.	Description	Length (mm)
Copper earth bar		
LK243-6	6 way	475
LK243-8	8 way	575
LK243-10	10 way	725
LK243-12	12 way	825
LK243-14	14 way	925
LK243-16	16 way	1,025
LK243-18	18 way	1,125
LK243-20	20 way	1,275
LK243-22	22 way	1,375
LK243-24	24 way	1,475
LK243-26	26 way	1,575
LK243-28	28 way	1,725
LK243-30	30 way	1,825
Tinned copper earth bar		
LK243-6-T	6 way	475
LK243-8-T	8 way	575
LK243-10-T	10 way	725
LK243-12-T	12 way	825
LK243-14-T	14 way	925
LK243-16-T	16 way	1,025
LK243-18-T	18 way	1,125
LK243-20-T	20 way	1,275
LK243-22-T	22 way	1,375
LK243-24-T	24 way	1,475
LK243-26-T	26 way	1,575
LK243-28-T	28 way	1,725
LK243-30-T	30 way	1,825
Earth Bar with stainless steel fixings and single disconnecting link		
Copper earth bar		
LK243-6SS	6 way	475
LK243-8SS	8 way	575
LK243-10SS	10 way	725
LK243-12SS	12 way	825
Tinned copper earth bar		
LK243-6TSS	6 way	475
LK243-8TSS	8 way	575
LK243-10TSS	10 way	725
LK243-12TSS	12 way	825

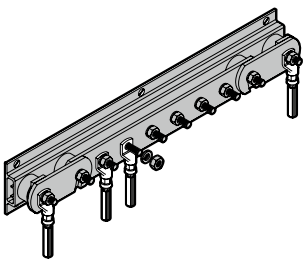


Earth bars

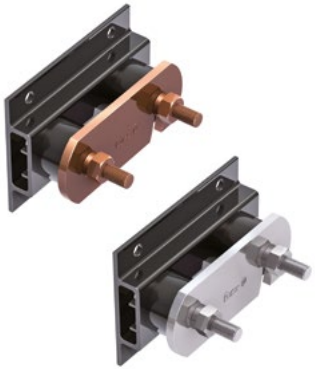
Earth bar with twin disconnecting link & accessories

Earth bar with twin disconnecting link

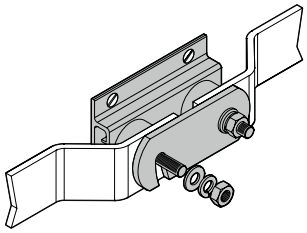
Part no.	Description	Length (mm)
Copper earth bar		
LK207-6	6 way	550
LK207-8	8 way	650
LK207-10	10 way	800
LK207-12	12 way	900
LK207-14	14 way	1,000
LK207-16	16 way	1,100
LK207-18	18 way	1,200
LK207-20	20 way	1,350
LK207-22	22 way	1,450
LK207-24	24 way	1,550
LK207-26	26 way	1,650
LK207-28	28 way	1,800
LK207-30	30 way	1,900
Tinned copper earth bar		
LK207-6-T	6 way	550
LK207-8-T	8 way	650
LK207-10-T	10 way	800
LK207-12-T	12 way	900
LK207-14-T	14 way	1,000
LK207-16-T	16 way	1,100
LK207-18-T	18 way	1,200
LK207-20-T	20 way	1,350
LK207-22-T	22 way	1,450
LK207-24-T	24 way	1,550
LK207-26-T	26 way	1,650
LK207-28-T	28 way	1,800
LK207-30-T	30 way	1,900
Earth Bar with stainless steel fixings and twin disconnecting links		
Copper earth bar		
LK207-6SS	8 way	550
LK207-8SS	10 way	650
LK207-10SS	12 way	800
LK207-12SS	14 way	900
Tinned copper earth bar		
LK207-6TSS	6 way	550
LK207-8TSS	8 way	650
LK207-10TSS	10 way	800
LK207-12TSS	12 way	900



Earth bar accessories



Part no.	Description
Copper earth bar	
LK004	Swan-neck link
LK205	Disconnecting link
Tinned copper earth bar	
LK004-T	Swan-neck link
LK205-T	Disconnecting link



FurseWELD

FurseWELD exothermic welding

FurseWELD high quality graphite moulds are designed to contain the exothermic reaction and to deliver safe, robust welded connections. Each mould is capable of producing up to 50 joints, if not more when properly maintained.

Remote ignition kit - FurseWELD

Part no.	Box quantity
Remote ignition kit	
IU100	FurseWELD remote ignition kit, includes carrying case, ignition unit, fob, cable/block, mains charger & UK 3 pin adaptor
Handle clamps	
HCPK1	Single part moulds (Price Key 1)
HCPK2	Single part moulds (Price Key 2)
HCPK3	Two part moulds (Price Key 3)
HCPK3-A	With chain grip, two part moulds (Price Key 3)
HCPK3-B	Sprung, single part moulds (Price Key 3)
HCPK4	Two-part moulds (Price Key 4)
HCPK4-A	With chain grip, multi-part moulds (Price Key 4)
HCPK5	Multi-part moulds (Price Key 5)
HCPK7	Multi-part moulds (Price Key 7)
HCPK8	Multi-part moulds (Price Key 8)
Hoods	
SHPK4	Stainless steel hood (80x80mm)
SHPK5	Stainless steel hood (100x100mm)
Strips	
IS100	FurseWELD ignition strips (5pcs)

Exothermic welding powder FurseWELD

Part no.	Box quantity
15P10	20
25P10	20
32P10	20
45P10	20
65P10	10
90P10	10
115P10	10
150P10	10
200P10	10
250P10	10

Accessories - FurseWELD

Part no.	Description
B135	Cable cleaning brush
BCM	Mould cleaning brush
BFC	Tape cleaning brush
DUXSEAL	Duxseal sealing compound (1 lb)
FG100	Flint gun
FLINTS	Replacement flints (pack of 100)
PACK-A	Packing
STM1-FU	Mould cleaning scraper
TB100-FU	Welding toolbox
TK100	Standard toolkit for bar to bar joints. Includes flint gun (FG100), tape cleaning brush (BFC), mould cleaning brush and scraper (BCM & STM1-FU)
TK200	Standard toolkit for cable to cable joints. Includes flint gun (FG100), cable cleaning brush (B135), mould cleaning brush and scraper (BCM & STM1-FU)
TK300	Remote Ignition Unit toolkit for bar to bar joints Includes tape cleaning brush (BFC), mould cleaning brush and scraper (BCM & STM1-FU)
TK400	Remote Ignition Unit toolkit for cable to cable joints Includes cable cleaning brush (B135), mould cleaning brush and scraper (BCM & STM1-FU)
MJ4	Mould jacket (Price Key 3 & 4)
MJ5	Mould jacket (Price Key 5)

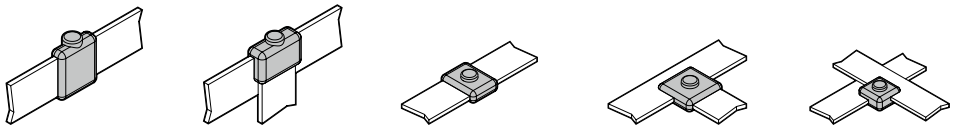
Copper sleeve accessory - FurseWELD

Part no.	Description	Conductor size (mm²)
S102-FU	Copper sleeve	10
S103	Copper sleeve	16
S105	Copper sleeve	2.5 / 4 / 6

FurseWELD

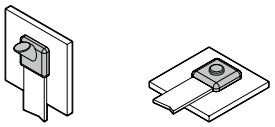
Connection selection guide

Bar to bar



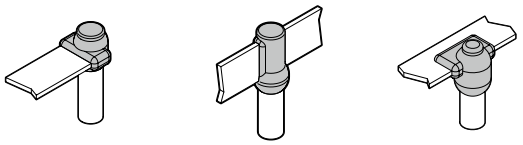
Connection Type	Type BB1	Type BB3	Type BB7	Type BB14	Type BB41

Bar to steel surface



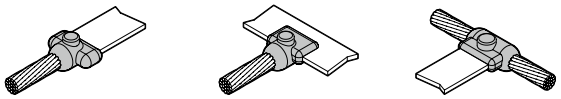
Connection Type	Type BS1	Type BS2

Bar to earth rod



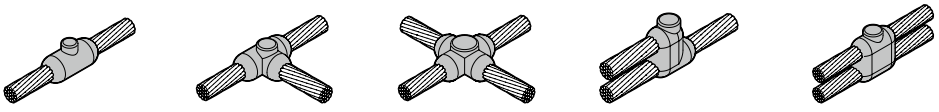
Connection Type	Type BR1	Type BR2	Type BR7

Cable to bar



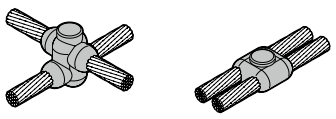
Connection Type	Type CB1	Type CB4	Type CB5

Cable to cable



Connection Type	Type CC1	Type CC2	Type CC4	Type CC6	Type CC7

Cable to cable

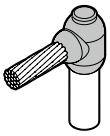
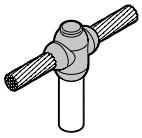
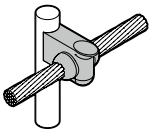
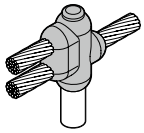
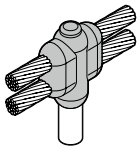


Connection Type	Type CC11	Type CC14

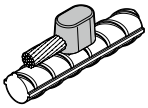
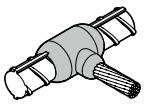
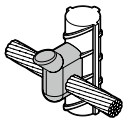
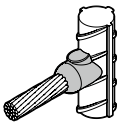
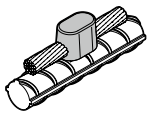
FurseWELD

Connection selection guide

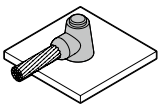
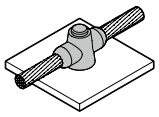
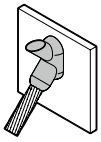
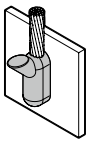
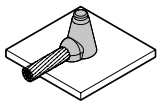
Cable to earth rod

Connection Type	Type CR1	Type CR2	Type CR3	Type CR17	Type CR24
					

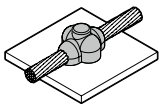
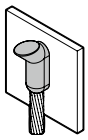
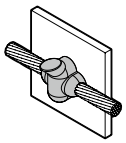
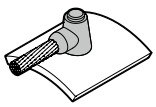
Cable to reinforcing bar

Connection Type	Type CRE1	Type CRE2	Type CRE3	Type CRE6	Type CRE17
					

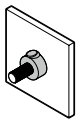
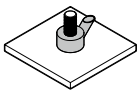
Cable to steel surface & pipe

Connection Type	Type CS1	Type CS2	Type CS3	Type CS7	Type CS8
					

Cable to steel surface & pipe

Connection Type	Type CS9	Type CS25	Type CS27	Type CS32
				

Stud to steel surface

Connection Type	Type RS1	Type RS2
		

Conductors must be in the orientation shown to achieve the correct connection

Furse offers technical support to assist with selection of joint type. If connections shown do not meet your requirements, please contact your local sales office for assistance.

Mains power protection
Product selector

The Furse ESP range of SPDs (power, data and telecom) are widely specified in all applications to ensure the continuous operation of critical electronic systems. They form part of a complete lightning protection solution to BS EN 62305.

Furse ESP M and ESP D power SPD products are Type 1+2+3 devices, making them suitable for installation at the service entrance, whilst giving superior voltage protection levels (enhanced to BS EN 62305) between all conductors or modes.

Protection for 230/400 V TN-S or TN-C-S supplies

Supply type	**Example 1**	**Example 2**
	No external lightning protection system fitted	No external lightning protection system fitted
	Underground mains supply feed	Exposed overhead mains supply feed

Main distribution board (MDB)	**Type 1+2+3**	**Type 1+2 OR Type 1+2+3**
3 Phase 400 V Service entrance, after electricity meter (Main distribution board (MDB)). Type 1+2+3 SPDs such as the ESP M and D series are used where the MDB directly feeds critical electronics	ESP 415 D1 Series **OR** ESP 415 M1 Series	ESP 415T1/12.5/TNS **OR** ESP 415MT1/12.5 or ESP 415DT1/12.5 **OR** to protect critical electronics fed from MDB ESP 415M2 Series

Sub-distribution board (SDB)	**Type 1+2+3 - 3 Phase**
Located >10 m from MDB feeding electronic equipment	ESP 415 D1 Series **OR** ESP 415 M1 Series **OR** ESP 415 CD40 (Type 2+3) Compact Series

Final circuit equipment	**For 13 A sockets** (e.g. servers)	**Equipment up to 32 A**
Located >10 m from SDB	ESP MC ESP MC/TN/RJ11 ESP MC/Cat-5e	ESP 240D-10A ESP 240D-32A

Mains protectors for specific systems		
	ESP PV series For Photovoltaic (solar panels) up to 1500 VDC	ESP WT series For 690V Wind Turbines

The active status indication informs the user of:

- Loss of power
- Loss of phase
- Excessive N-E voltage
- Reduced protection

—
The SPD and supply status can also be monitored remotely via the volt-free contact.

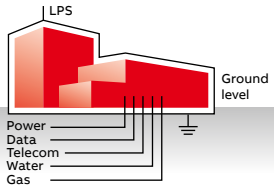
Product selection guide - Mains power protection

Product no.	GID code	Product no.	GID code
ESP 415 D1	7TCA085460R0105	ESP 415 CD40	7TCA085460R0303
ESP 415 M1	7TCA085460R0112	ESP 240 D1	7TCA085460R0086
ESP 415 M2	7TCA085460R0119	ESP 240 M1	7TCA085460R0089
ESP 415 M4	7TCA085460R0124	ESP MC	7TCA085430R0003
ESP 415T1/25/TNS	7TCA085460R0499	ESP MC/TN/RJ11	7TCA085430R0005
ESP 415T1/12.5/TNS	7TCA085460R0496	ESP MC/Cat-5e	7TCA085430R0004
ESP 415T2/50/TNS	7TCA085460R0388	ESP 240D-10A	7TCA085460R0328
ESP 240T1/25/TNS	7TCA085400R0499	ESP 240D-32A	7TCA085460R0322
ESP 240T2/50/TNS	7TCA085460R0388	ESP 240T3/SKT	7TCA085450R0069

Example 3

External lightning protection system fitted

Multiple connected metallic services



Type 1+2+3

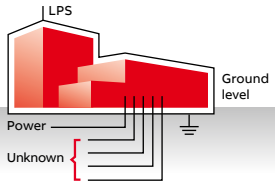
ESP 415 D1 Series **OR**

ESP 415 M1 Series

Example 4

External lightning protection system fitted

No. of services unknown



Type 1+2 OR Type 1+2+3

For LPL I & II:
ESP 415T1/25/TNS
LPL III or IV:
ESP 415T1/12.5/TNS

OR to protect critical electronics fed from MDB

For LPL I & II:
ESP 415 M4 Series
LPL III or IV:
ESP 415 M2 Series

Type 1+2+3 - 1 Phase

ESP 240 D1 Series, or
ESP 240 M1 Series, or
ESP 240 CD40
(Type 2+3)
Compact Series

OR SDB located >10 m from MDB not directly feeding electronic equipment

For 3 Phase 400 V
ESP 415T2/50/TNS
For 1 Phase 230 V
ESP 240T2/50/TNS

Fused spurs or single phase sockets

For single phase spurs/socket outlets up to 16 A
ESP 240T3/SKT

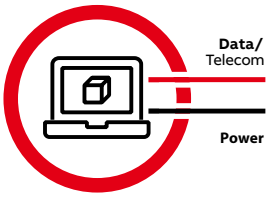
ESP DC series
For DC systems up to 48V

ESP CDT2 series for residential consumer units and space critical panel boards

Data & signal protection

Product selector - Data line protection

Fieldbus/ PROFIBUS Systems HART Systems RS485	Screw terminals:	 **ESP RS485** Flat/DIN Mount 7TCA085400R0191	 **ESP SL RS485** Slim DIN Mount 7TCA085400R0193	 **ESP RS485 or ESP SRS485/PT** Multiple Lines 7TCA085400R0191 7TCA085400R0647	Screw/Spring terminals:	 **ESP RS485Q or ESP RS485Q/PT** Multiple Lines (DIN Mount) 7TCA085400R0192 7TCA085400R0475 (spring "Push Terminal" PT version)	
4 - 20 mA current loops	Screw terminals:	 **ESP SL30L/4-20** Slim mount 7TCA085400R0070	 **ESP SE30/4-20** Slim mount 7TCA085400R0648				
Telephone ISDN DSL G.FAST	Screw terminals:	 **ESP TN** Flat Mount 7TCA085400R0171	 **ESP SL TN** Slim Mount 7TCA085400R0195	 **ESP SL TNL** Slim Mount with LED 7TCA085400R0226	 **ESP STN or ESP STN/PT** Slim Mount 7TCA085400R0652 7TCA085400R0653	Screw/Spring terminals:	 **ESP TNQ or ESP TNQ/PT** Multiple Lines 7TCA085400R0183 7TCA085400R0472 (spring "Push Terminal" PT version)
2 wire systems (30 V)	Screw terminals:	 **ESP 30E** Flat Mount 7TCA085400R0104	 **ESP SL30** Slim Mount 7TCA085400R0067	 **ESP 30SD or ESP 30SE** Slim Mount 7TCA085400R0099 7TCA085400R0104	Screw/Spring terminals:	 **ESP 30Q or ESP 30Q/PT** Multiple Lines 7TCA085400R0107 7TCA085400R0476 (spring "Push Terminal" PT version)	Protection for different voltages are available
Resistance Temperature Detectors (RTD) 3 wire systems	Screw terminals:	 **ESP RTD** Flat/DIN Mount 7TCA085460R0157	 **ESP SL RTD** Slim (DIN Mount) 7TCA085400R0232	Screw/Spring terminals:	 **ESP RTDQ or ESP RTDQ/PT** Multiple Lines (DIN Mount) 7TCA085400R0158 7TCA085400R0480 (spring "Push Terminal" PT version)		
3 wire systems (30 V)	Screw terminals:	 **ESP SL30/3W** Slim Mount 7TCA085400R0268	Protection for different voltages are available				
US regions UL Approved	Screw terminals:	 **ESP SL30** Slim Mount 7TCA085400R0067	Screw/Spring terminals:	 **ESP 30Q or ESP 30Q/PT** Multiple Lines 7TCA085400R0107 7TCA085400R0476 (spring "Push Terminal" PT version)	 Protection for different voltages are available		

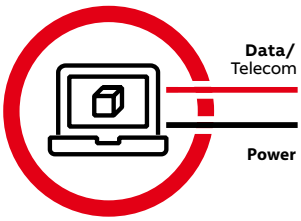


IMPORTANT:
Equipment is ONLY protected against transient overvoltages if all incoming / outgoing mains and data lines have protection fitted.

Furse data and signal SPD products are Class D+C+B tested (to IEC/BS EN 61643-21), making them suitable for installation at the service entrance, whilst giving superior voltage protection levels (enhanced to BS EN 62305) between all conductors or modes.
Furse data and signal SPDs come in a variety of formats to allow easy integration within any installation.
Key variants offer active status indication, screw terminals and UL listing.

Telecoms & computer line protection

Product selector

Common applications	Service entrance protectors	Critical terminal equipment - located >20 m from service entrance
Analogue Telecom systems Twisted pair data protection see Furse Application Note AN005) Standard, for twisted pair lines	 **ESP TN Series** 7TCA085400R0171 **ESP TN/BX Series** 7TCA085400R0175 **ESP TN/2BX Series** 7TCA085400R0172	**ESP MC/TN/RJ11 Series** e.g. Fax machines / Modems 7TCA085430R0005
Compact, ideal where space is a premium	 **ESP SL TN Series** 7TCA085400R0195	
Multiple line protection in a single unit	 **ESP TNQ Series** 7TCA085400R0183	
For BT type socket systems	 **ESP TN/JP Series** 7TCA085400R0177	**IMPORTANT:** Equipment is ONLY protected against transient overvoltages if all incoming / outgoing mains and data lines have protection fitted.
For PBX systems terminating of LSA-Plus disconnection modules	 **ESP K10T1** 7TCA085400R0130 **ESP KT1** 7TCA085400R0135 **ESP KE10** 7TCA085400R0134	

System	Computer system protector	
Computer networks with RJ45 connection	 **ESP Cat-6 Series** 7TCA085400R0023	 **ESP MC/Cat-5 Series** 7TCA085430R0004

Furse telecom and computer line SPD products are Class D+C+B tested (to IEC/BS EN 61643-21), making them suitable for installation at the service entrance, whilst giving superior voltage protection levels (enhanced to BS EN 62305) between all conductors or modes. Furse SPDs come in a variety of formats to allow easy integration within any installation.

Additional information
We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB AG does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilisation of its contents – in whole or in parts – is forbidden without prior written consent of ABB AG.

Tercel International Pty Ltd

w. tercel.com.au

e. info@tercel.com.au

© Copyright 2025 ABB. All rights reserved.
Specifications subject to change without notice.

9AKK108470A6789 / 01.2025