

Moulded case circuit breakers

Page

MCCB Type

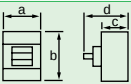
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Standard TemBreak circuit breaker

selection guide

Type	XM30PB	XS125CS	XS125CJ	XS125NS	XS125NJ
Ampere frame	30A	125A		125A	
Number of poles	3P	1P ¹⁾ 2P ²⁾  3P 4P 		1P ¹⁾ 2P ²⁾ 3P 4P	
Outside view					
Notes:					
¹⁾ 1 Pole breaker only, XS125CS and XS125NS respectively.					
²⁾ 2 pole breaker is a 3 pole breaker with the centre pole omitted.					
◆ Supplied as standard. ○ Optional standard.					
● Yes or available. – Not available					
 Indent only					
Rated current (A). In NRC – Nominal rated current ASR – Adjustable setting range	NRC	NRC	NRC ASR	NRC	NRC ASR
Rated current at 40°C	0.7 8.0	16 50 20 12.5 20	min max	16 50 20 12.5 20	min max
	1.4 10	20 63 32 20 32		20 63 32 20 32	
	2.0 12	25 80 50 32 50		25 80 50 32 50	
	2.6	32 100 63 40 63		32 100 63 40 63	
	4.0	40 125 100 63 100		40 125 100 63 100	
	5.0	125 80 125		125 80 125	
AC RATED INSULATION VOLTAGE (UI)	690	690		690	
AC RATED BREAKING CAPACITY sym r.m.s. [kA]					
IEC 947-2 [Icu] IEC 957-2 [Ics]	1100V –	–		–	
AS 3947-2 [Icu] AS 3947-2 [Ics]	1000V –	–		–	
Note: Rated Impulse withstand voltage	690V –	–		5/2.5	
Uimp (kV) is 8kV on all XS, XE and XH MCCB's	660V –	–		5/2.5	
	500V –	7.5/3.8		12/6	
	440V 85	10/5 10/5		22/11 22/11	
	415V 85	14/7 14/7		25/13 25/13	
	400V 85	18/9 18/9		25/13 25/13	
	380V 85	18/9 18/9		30/15 30/15	
	240V 125	14/7 25/13		25/13 25/13	
AS 2184	440V 85	14		25	
	415V 85	18		30	
NEMA AB-1	600V 85	–		12	
	480V 85	– 10		22	
without Inst.	240-690V –	–		–	
DC RATED BREAKING	250V –	– 10		15	
CAPACITY (kA)	125V –	10 15		15 20	
RATED SHORT TIME CURRENT r.m.s. [kA] [Icw]		–		–	
DIMENSIONS (mm)					
	a	78	30 90 120	30 90 120	
	b	148	155	155	
	c	98	86	86	
	d	116	104	104	
Weight (kg) ◆ marked standard type		1.3	0.51 1.3 1.58	0.51 1.3 1.58	
CONNECTION AND MOUNTINGS					
front terminal screw	◆	◆		◆	
connect (FC) attached flat bar	–	– ○		– ○	
solderless terminal (PWC)	○	○		○	
rear bolt stud	○	– ○		– ○	
connect (RC) flat bar stud	–	–		–	
plug-in (PM) for switchboard	○	– ○		– ○	
for distribution board	–	– ○		– ○	
draw-out (DO)	–	–		–	
STANDARD FEATURES					
contact indicator	–	●		●	
trip button	–	– ●		– ●	
PROTECTIVE FUNCTIONS					
Electronic type					
Adjustable LTD, STD & INST	–	– –		– –	
Adjustable GFT or Adjustable PTA (option)	–	– –		– –	
Trip indicators (option) (contacts)	–	– –		– –	
Thermal-magnetic type	fixed				
thermal and fixed magnetic trips	–	● –		● –	
thermal and adjustable magnetic trips	–	–		–	
adjustable thermal and fixed magnetic trips	–	– ●		– ●	
adjustable thermal and magnetic trips	–	–		–	
ACCESSORIES (option)	CODE				
Internally mounted					
auxiliary switch	AUX	●	– ●	– ●	
alarm switch	ALT	●	– ●	– ●	
shunt trip	SHT	●	●	●	
undervoltage trip	UVT	–	– ●	– ●	
Externally mounted					
motor operator	MOT	–	– ●	– ●	
external panel mounted type	XFE	–	–	–	
operating breaker mounted type	TFJ	●	– ●	– ●	
handle variable depth type	XFH	●	– ●	– ●	
IP 65 handle variable depth type	TLK	●	– ●	– ●	
extension handle	EHA	–	–	–	
mechanical interlock front type	MIF	●	– ●	– ●	
mechanical interlock rear type	MIB	–	– ●	– ●	
mechanical interlock cable type	MIC	–	–	–	
key interlock	KIL	●	– ●	●	
handle holder	HH	●	●	●	
handle lock	HL	●	●	●	
captive padlock attachment	XKA	–	● ●	●	
terminal cover front connect type	TCF	–	– ●	– ●	
terminal cover rear/plug-in type	TCR	–	– ●	– ●	
interpole barriers	TBA	–	– ●	– ●	
accessories lead terminals	LTF	●	– ●	– ●	
OCR sealing kit	OCR	–	– ●	– ●	

Standard TemBreak circuit breaker selection guide

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Standard TemBreak circuit breaker

selection guide

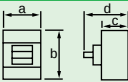
Type		XS630CJ		XS630NJ		XS800NJ		
Ampere frame		630A		630A		800A		
Number of poles		3 4P 		3P 4P 		3P 4P 		
Outside view								
Notes:								
*) Adjustable ground fault available on indent, fitted externally.								
*) LED indicators only or LED contacts, please specify.								
◆ Supplied as standard. ○ Optional standard.								
● Yes or available. – Not available								
 Indent only								
Rated current (A). In NRC – Nominal rated current ASR – Adjustable setting range		NRC ASR		NRC ASR		NRC ASR		
			min max		min max		min max	
Rated current at 40°C		400	250 400	400	250 400	800	500 800	
		630	400 630	630	400 630			
AC RATED INSULATION VOLTAGE (Ui)		690		690		690		
AC RATED BREAKING CAPACITY sym r.m.s. [kA]		ICU/ICS		ICU/ICS		ICU/ICS		
IEC 947-2 [Icu] IEC 957-2[Ics]		1100V	–	–	–	–	–	
AS 3947-2 [Icu] AS 3947-2[Ics]		1000V	–	–	–	–	–	
Note: Rated Impulse with stand voltage		690V	16/8	20/10	20/10	20/10	20/10	
Uimp (kV) is 8kV on all XS, XE and XH MCCB's		660V	16/8	20/10	20/10	20/10	20/10	
		500V	25/13	35/18	35/18	35/18	35/18	
		440V	30/15	50/25	50/25	50/25	50/25	
		415V	35/18	50/25	50/25	50/25	50/25	
		400V	42/23	50/25	50/25	50/25	50/25	
		380V	45/23	65/33	65/33	65/33	65/33	
		240V	50/25	85/43	85/43	85/43	85/43	
AS 2184		440V	36	50	50	50	50	
		415V	45	65	65	65	65	
NEMA AB-1		600V	25	30	30	30	30	
		480V	35	50	50	50	50	
without Inst.		240-690V	–	–	–	–	–	
DC RATED BREAKING		250V	40	40	40	40	40	
CAPACITY (kA)		125V	40	40	40	40	40	
RATED SHORT TIME CURRENT r.m.s. [kA] [Icw]								
DIMENSIONS (mm)								
		a	210 280	210 280	210 280	210 280		
		b	273	273	273	273		
		c	103	103	103	103		
		d	145	145	145	145		
Weight (kg) ◆ marked standard type		9	11.5	9 11.5	9.4 12.2			
CONNECTION AND MOUNTINGS								
front	terminal screw	–	–	–	–			
connect (FC)	attached flat bar	◆	◆	◆	◆			
	solderless terminal (PWC)	○	○	○	○			
rear	bolt stud	–	–	–	–			
connect (RC)	flat bar stud	○	○	○	○			
plug-in (PM)	for switchboard	○	○	○	○			
	for distribution board	–	–	–	–			
draw-out (DO)		○	○	○	○			
STANDARD FEATURES								
	contact indicator	●	●	●	●			
	trip button	●	●	●	●			
PROTECTIVE FUNCTIONS								
Electronic type								
Adjustable LTD, STD & INST		–	–	–	–			
Adjustable GFT or Adjustable PTA (option) *)		–	–	–	–			
Trip indicators (option) (contacts)		–	–	–	–			
Thermal-magnetic type								
thermal and fixed magnetic trips		–	–	–	–			
thermal and adjustable magnetic trips		–	–	–	–			
adjustable thermal and fixed magnetic trips		–	–	–	–			
adjustable thermal and magnetic trips		●	●	●	●			
ACCESSORIES (option)		CODE						
Internally mounted	auxiliary switch	AUX	●	●	●			
	alarm switch	ALT	●	●	●			
	shunt trip	SHT	●	●	●			
	undervoltage trip	UVT	●	●	●			
Externally mounted	motor operator	MOT	●	●	●			
	external panel mounted type	XFE	–	–	–			
	operating breaker mounted type	TFJ	●	●	●			
	handle variable depth type	XFH	●	●	●			
	IP 65 handle variable depth type	TLK	●	●	●			
	extension handle	EHA	●	●	●			
	mechanical interlock front type	MIF	●	●	●			
	mechanical interlock rear type	MIB	●	●	●			
	mechanical interlock cable type	MIC	●	●	●			
	key interlock	KIL	●	●	●			
	handle holder	HH	●	●	●			
	handle lock	HL	●	●	●			
	captive padlock attachment	XKA	●	●	●			
	terminal cover front connect type	TCF	●	●	●			
	terminal cover rear/plug-in type	TCR	●	●	●			
	interpole barriers	TBA	●	●	●			
	accessories lead terminals	LTF	●	●	●			
	OCR sealing kit	OCR	●	●	●			

Standard TemBreak circuit breaker selection guide

	XS2000NE			XS2500NE			TL30F			TL100F			TL225F		
	2000A			2500A			30A			100A 225A					
	3P		4P	3P		4P 	3P		4P 	3P		4P 	3P		
															
	NRC		ASR	NRC		ASR	NRC		NRC		NRC		NRC		
		min	max		min	max									
	2000	1000	2000	2500	1250	2500	15		15	60		125			
							20		20	75		150			
							30		30	100		175			
									40			200			
									50			225			
	690			690			690		690			690			
	ICU/ICS			ICU/ICS											
	—			—			—		—			—			
	—			—			—		—			—			
	45/42			45/42			25/13		25/13			25/13			
	45/42			45/42			25/13		25/13			25/13			
	65/49			65/49			42/31		60/30			60/30			
	85/64			85/64			120/60		120/60			120/60			
	85/64			85/64			120/60		120/60			120/60			
	85/64			85/64			120/60		120/60			120/60			
	100/75			100/75			120/60		120/60			120/60			
	125/94			125/94			120/60		120/60			120/60			
	85			85			120		120			120			
	100			100			120		120			120			
	65			65			25		42			60			
	85			85			42		75			75			
	42			42			—		—			—			
	—			—			40		40			40			
	—			—			40		40			40			
	42 (0.3 secs)			42 (0.3 secs)			—		—			—			
	320	429		320	429		90	120	105	140		140			
	450			450			155		165			260			
	185			185			86		125			133			
	245			245			104		143			167			
	54	67		62.5	78.2		1.3	1.58	3.2	3.8		6			
	—			—			◆		◆			◆			
	○			—			○		—			○ (Bar)			
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	—			—											

Non-automatic circuit breaker

selection guide

Type		XS125NN	XE250NNC	XS250NN	XS400NN	
Ampere frame		125A	250A	250A	400A	
Number of poles		3P 4P ⁱ	ⁱ	3P 4P ⁱ	3P 4P ⁱ	
Outside view						
Notes:						
◆ Supplied as standard.	○ Optional standard.					
● Yes or available.	— Not available					
ⁱ Indent only						
RATINGS	AC	690	690	690	690	
RATED OPERATIONAL VOLTAGE (V)	DC	250	250	250	250	
AS 3947-2 IEC 947-2						
RATED SHORT CIRCUIT MAKING CAPACITY	peak/kA	2.5	5.5	6	9	
RATED SHORT TIME CURRENT r.m.s. [kA]		1.8 (1 sec)	3 (1 sec)	4 (1 sec)	5 (0.3 secs)	
DIMENSIONS (mm)						
	a	90	120	105	140	185
	b	155	160	165	260	
	c	86	60	86	103	
	d	104	83	107	131	
Weight (kg) ◆ marked standard type		1.1	1.4	1.85	2.4	4.7
CONNECTION AND MOUNTINGS						
front	terminal screw	◆	◆	◆	◆	
connect (FC)	attached flat bar	—	○	○	○	
	solderless terminal (PWC)	○	○	○	○	
rear	bolt stud	○	—	—	—	
connect (RC)	flat bar stud	—	○	○	○	
plug-in (PM)	for switchboard	○	○	○	○	
	for distribution board	○	—	—	—	
draw-out (DO)		—	—	—	○	
STANDARD FEATURES						
	ON-OFF colour indicator	●	●	●	●	
	trip button	●	●	●	●	
ACCESSORIES (option)	CODE					
Internally mounted	auxiliary switch	AUX	●	●	●	
	alarm switch	ALT	●	●	●	
	shunt trip	SHT	●	●	●	
	undervoltage trip ¹⁾	UVT	●	●	●	
Externally mounted	motor operator	MOT	—	●	●	
	external panel mounted type	XFE	●	●	●	
	operating breaker mounted type	TFJ	—	●	●	
	handle variable depth type	XFH	—	●	●	
	IP 65 handle variable depth type	TLK	—	—	—	
	extension handle	EHA	—	●	●	
	mechanical interlock front type	MIF	—	●	●	
	mechanical interlock rear type	MIB	●	●	●	
	handle holder	HH	●	●	●	
	handle lock	HL	●	●	●	
	terminal cover front connect type	TCF	●	●	●	
	terminal cover rear connect/plug-in type	TCR	●	●	●	
	interpole barriers	TBA	● ²⁾	● ²⁾	● ²⁾	● ²⁾
	accessories lead terminals ³⁾ LTF	—	—	—	—	●
	⁴⁾ LTS	●	●	●	—	
	door flange	DF	●	●	●	
	IP 20 protection plug in type	IP 20	●	●	●	
Maximum switching current	AC	750	1500	1500	2400	
	DC	313	625	625	1000	
Utilisation Category		AC-23A	AC-23A	AC-23A	AC-23A	
Endurance	number of operations without current	7000	7000	7000	4000	
	number of operations with current	1000	1000	1000	1000	

Notes:

- ¹⁾ For AC UVT, a UVT Controller is mounted externally.
- ²⁾ Line side interpole barriers are supplied as standard.
- ³⁾ Draw-out leads, horizontally.
- ⁴⁾ Draw-out leads, vertically.

Non-automatic circuit breaker selection guide

[illegible]



NEW

TemBreak *Plus*

for
high performance
applications

**More choice for more
applications**

- **Greatly improved selectivity**
- **New Ics = 100% Icu types**
- **Increased breaking capacity**



NHP

NEW

XKA

**captive
lock
attachment**



To provide greater safety in applications requiring MCCBs to be locked, NHP has developed a new line of captive padlockable attachments with the following features:

Features:

- **Captive-permanently secured to the front of MCCB**
- **For locking in the ON or OFF position**
- **Locking is not dependant on the size of the padlock (up to 8mm)**
- **Up to 2 padlocks can be installed, one either side**
- **Will accept multiple padlock hasps**
- **Field fittable**
- **Metal construction**
- **Sizes for MCCBs 20 - 400 A now available**

NHP

ELECTRICAL ENGINEERING PRODUCTS PTY LTD

A.B.N. 84 004 304 812

XS125 single pole series (CS / NS)

- ❑ Fixed thermal and magnetic trip.
- ❑ Current rating @ 45°C 16 A - 125 A.
- ❑ Standards AS 2184/AS 3947-2.
- ❑ Breaking capacity at 250 V DC, 500 V AC.

XS125CS (18 kA) 1 pole

Ampere
rating

Cat. No.

16	XS125CS 16 1
20	XS125CS 20 1
25	XS125CS 25 1
32	XS125CS 32 1
40	XS125CS 40 1
50	XS125CS 50 1
63	XS125CS 63 1
80	XS125CS 80 1
100	XS125CS 100 1
125	XS125CS 125 1

XS125NS (30 kA) 1 pole

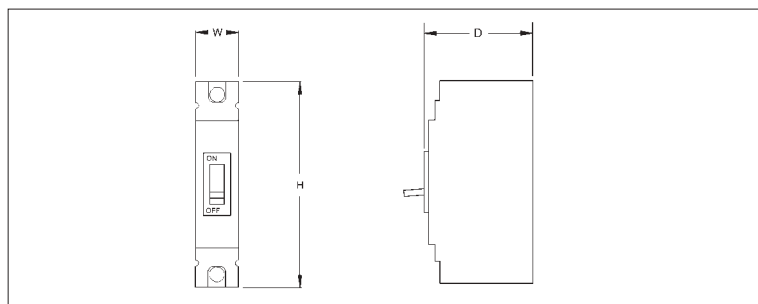
Ampere
rating

Cat. No.

16	XS125NS 16 1
20	XS125NS 20 1
25	XS125NS 25 1
32	XS125NS 32 1
40	XS125NS 40 1
50	XS125NS 50 1
63	XS125NS 63 1
80	XS125NS 80 1
100	XS125NS 100 1
125	XS125NS 125 1

Dimensions (mm)

Description	Height	Width	Depth	kg
XS125CS/NS	155	30	86	0.5



Short circuit capacity

Model	I/C	Voltage
XS125CS	18 kA (AS 2184)	240V 50Hz
XS125NS	30 kA (AS 2184)	240V 50Hz

Refer to ratings chart at the front of this section.
For ratings to AS 3947-2 and AS 2184, and Ics/Icu.

Cross reference table

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Product extensions

Section/page

Chassis (TemWay)	6 - 2
Panelboards (TPX)	2 - 29

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2/Australia
AS 2184-1990/Australia
JIS C 8372/JAPAN
JEC 160/JAPAN

Approvals

ASTA/UK, Aust. standards
Marine
NK/JAPAN
Lloyd R/UK
ABS/USA
GL/GERMANY
BV/France

Notes: ¹⁾ An internal shunt trip may be mounted in an XS125CS/NS MCCB.
Other accessories are external.

XS125 series

- Adjustment range 63 - 100% of nominal current rating.
- Standards AS 2184/AS 3947-2.
- Adjustable thermal and fixed magnetic trip.

XS125CJ (18 kA) 3 pole

Ampere rating	Min	Max	Cat. No.
20	12.5	20	XS125CJ 20 3
32	20	32	XS125CJ 32 3
50	32	50	XS125CJ 50 3
63	40	63	XS125CJ 63 3
100	63	100	XS125CJ 100 3
125	80	125	XS125CJ 125 3
125	Non-Auto (1.8 kA for 1sec)		Refer page 5 - 46

XS125NJ (30 kA) 2 pole ³⁾

Ampere rating	Min	Max	Cat. No.
20	12.5	20	XS125NJ 20 2
32	20	32	XS125NJ 32 2
50	32	50	XS125NJ 50 2
63	40	63	XS125NJ 63 2
100	63	100	XS125NJ 100 2
125	80	125	XS125NJ 125 2

XS125NJ (30 kA) 3 pole

20	12.5	20	XS125NJ 20 3
32	20	32	XS125NJ 32 3
50	32	50	XS125NJ 50 3
63	40	63	XS125NJ 63 3
100	63	100	XS125NJ 100 3
125	80	125	XS125NJ 125 3

XS125NJ (30 kA) 4 pole

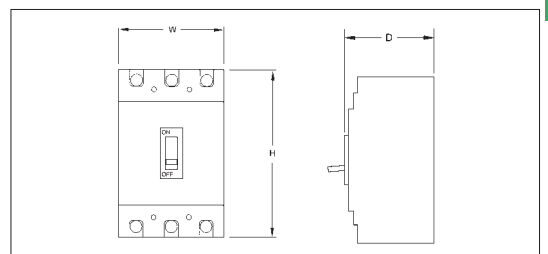
20	12.5	20	XS125NJ 20 4
32	20	32	XS125NJ 32 4
50	32	50	XS125NJ 50 4
63	40	63	XS125NJ 63 4
100	63	100	XS125NJ 100 4
125	80	125	XS125NJ 125 4

Notes: ¹⁾ MCCBs only.
²⁾ Poles in series. Refer applications Section 10.
³⁾ 2 pole models use a 3 pole body with centre pole disabled.
 Special generator protection MCCBs available – low instantaneous magnetic setting.



Dimensions (mm)

Description	Height	Width	Depth	kg
XS125CJ 3 pole	155	90	86	1.3
XS125NJ 2 pole	155	90	86	1.3
XS125NJ 3 pole	155	90	86	1.3
XS125NJ 4 pole	155	120	86	1.58



Short circuit capacity

Model	I/C	Voltage
XS125CJ	18 kA (AS2184)	415V 50Hz
XS125NJ	30 kA (AS2184)	415V 50Hz

DC use	I/C ²⁾	Voltage
XS125CJ	10 kA	250V DC
XS125NJ	15 kA	250V DC

Refer to ratings chart at the front of this section.
 For ratings to AS 3947-2 and AS 2184, and Ics/Icu.

Cross reference table

	Section/page
Accessories	6 - 10 to 6 - 11
Cascade HRC back up	13 - 2
Selectivity & cascade	13 - 5 to 13 - 7
Application data	13
Characteristics curves	7 - 5
Motor starting	13
Connection & mounting details	7 - 26, 8 - 31, 32, 33
Detailed dimen. - MCCB only	7 - 26
- motor operators	7 - 28

Product extensions

	Section/page
Chassis (TemWay, MHC, UHC)	6 - 2 to 6 - 7
Panelboards (TPX)	2 - 29
TemCurve	13 - 43

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2/Australia
AS 2184-1990/Australia ¹⁾
JIS C 8372/JAPAN
JEC 160/JAPAN

Approvals

ASTA/UK, Aust. standards
Marine
NK/JAPAN
Lloyd R/UK
ABS/USA
GL/GERMANY
BV/France
DNV NORWAY

XH125 series

- Adjustment range 63 - 100% of nominal rating.
- Co-ordinated with Sprecher + Schuh contactors.
- Standards AS 2184/AS 3947-2.
- Adjustable thermal, fixed magnetic trip.

XH125NJ (50 kA) 3 pole

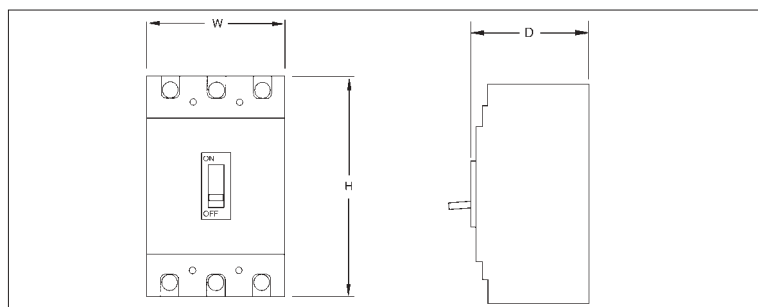
Ampere rating	Min	Max	Cat. No.
20	12.5	20	XH125NJ 20 3
32	20	32	XH125NJ 32 3
50	32	50	XH125NJ 50 3
63	40	63	XH125NJ 63 3
100	63	100	XH125NJ 100 3
125	80	125	XH125NJ 125 3

XH125NJ (50 kA) 4 pole

20	12.5	20	 XH125NJ 20 4
32	20	32	 XH125NJ 32 4
50	32	50	 XH125NJ 50 4
63	40	63	 XH125NJ 63 4
100	63	100	 XH125NJ 100 4
125	80	125	XH125NJ 125 4

Dimensions (mm)

Description	Height	Width	Depth	kg
XH125NJ 3 pole	155	90	86	1.3
XH125NJ 4 pole	155	120	86	1.6



Bolt-on earth leakage module ELB 125, refer to Section 11 for further details.

Short circuit capacity

Model	I/C	Voltage
XH125NJ	50 kA	415V 50Hz
DC use	I/C ²⁾	Voltage
XH125NJ	40 kA	250V DC

Refer to ratings chart at the front of this section.
For ratings to AS 3947-2 and AS 2184, and Ics/Icu.

Cross reference table

	Section/page
Accessories	6 - 10 to 6 - 11
Selectivity and cascade	13 - 5 to 13 - 7
Application data	13
Characteristics curves	7 - 5
Motor starting (Type '1' & '2')	13
Connection and mounting details	7 - 26, 8 - 31, 32, 33
Detailed dimen. - MCCB only	7 - 26
- motor operators	7 - 28

Product extensions

	Section/page
Chassis (TemWay, MHC, UHC)	6 - 2 to 6 - 7
TemCurve	13 - 43
Residual current relays	11

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3858-1990/Australia
AS 2184-1990/Australia ¹⁾
JIS C 8372/JAPAN
JEC 160/JAPAN

Approvals

ASTA/UK, Aust. standards
Marine
NK/JAPAN
Lloyd R/UK
ABS/USA
GL/GERMANY
BV/France
DNV NORWAY

Notes: ¹⁾ MCCBs only.

²⁾ Poles in series. Refer applications section 10.
Special low instantaneous magnetic, generator protection MCCB's available on request.

 Available on indent only.

XH125PJ PowerBreaker series Ics = 50 kA

- Powerful interrupting capacities.
- Limitation of system damage.
- Unique contact structure.
- Icu = Ics = 50kA.
- Adjustable thermal, fixed magnetic trip.
- Adjustment range 63 - 100% of nominal current rating.
- Standards IEC947-2/AS3974-2.

*TemBreak
Plus*



XH125PJ (50 kA) 3 pole

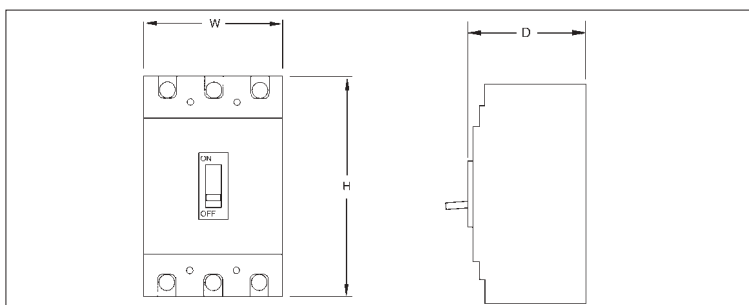
Ampere rating	Min	Max	Cat. No.
20	12.5	20	XH125PJ 20 3
32	20	32	XH125PJ 32 3
50	32	50	XH125PJ 50 3
63	40	63	XH125PJ 63 3
100	63	100	XH125PJ 100 3
125	80	125	XH125PJ 125 3

XH125PJ (50 kA) 4 pole

20	12.5	20	XH125PJ 20 4
32	20	32	XH125PJ 32 4
50	32	50	XH125PJ 50 4
63	40	63	XH125PJ 63 4
100	63	100	XH125PJ 100 4
125	80	125	XH125PJ 125 4

Dimensions (mm)

Description	Height	Width	Depth	kg
XH125PJ 3 pole	155	90	86	1.3
XH125PJ 4 pole	155	120	86	1.6



Notes: ¹⁾ Poles in series. Refer applications section 10.

Available on indent only.

Short circuit capacity

AC use			
Model	Icu	Ics	Voltage
XH125PJ	50 kA	50 kA	400/415V

DC use ¹⁾			
Model	Icu	Ics	Voltage
XH125PJ	40 kA	—	250V DC

Cross reference table

	Section/page
Accessories	6 - 10 to 6 - 11
Selectivity and cascade	13 - 5 to 13 - 7
Application data	13
Characteristics curves	7 - 5
Motor starting (Type 1 & 2)	13
Connection and mounting details	7 - 26, 8 - 31, 32, 33
Detailed dimen. - MCCB only	7 - 26
- motor operators	7 - 28

Product extensions

	Section/page
Chassis (TemWay, MHC, UHC)	6 - 2 to 6 - 7
TemCurve	13 - 43
Residual current relays	11

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2 Australia

Approvals

ASTA/UK, Aust. standards
Marine
Lloyd R/UK
ABS/USA
GL/GERMANY
BV/France

XE225NC economical series

- Standards AS 2184/AS 3947-2.
- Fixed thermal magnetic trip.

Shallow
depth MCCB
only 60 mm



XE225NC (18 kA) 3 pole

Ampere
rating (fixed)

Cat. No. 3)

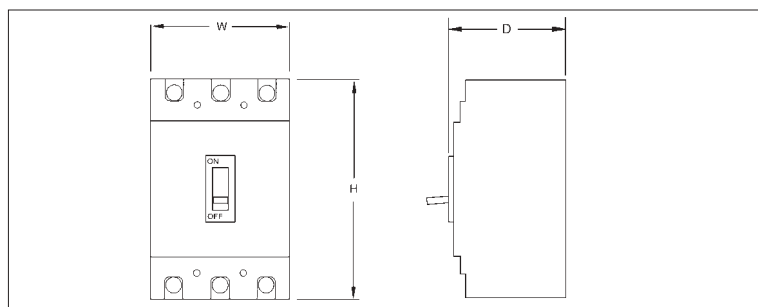
125	XE225NC 125 3
150	XE225NC 150 3
175	XE225NC 175 3
200	XE225NC 200 3
225	XE225NC 225 3

XE250 Isolator

250	Non-Auto (3kA for 1sec ¹⁾ ⁴⁾	Refer page 5-46
-----	--	-----------------

Dimensions (mm)

Description		Height	Width	Depth	kg
XE225N	3 pole	160	105	67	1.85



Short circuit capacity

Model	I/C	Voltage
XE225NC	18kA (AS 2184)	415V 50Hz

DC use	I/C	Voltage
XE225NC	10 kA	250V DC

Refer to ratings chart at the front of this section.
For ratings to AS 3947-2 and AS 2184, and Ics/Icu.

Cross reference table

	Section/page
Accessories	6 - 12
Selectivity & cascade	13 - 5 to 13 - 7
Application data	13
Characteristics curves	7 - 6
Connection & mounting details	7 - 29, 8 - 31, 32, 33
Detailed dimensions	
- MCCB only	7 - 29
- motor operators	7 - 30

Product extensions

	Section/page
TemCurve	13 - 43
Residual current relays	11

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2/Australia
AS 2184-1990/Australia ²⁾
JIS C 8372/JAPAN
JEC 160/JAPAN

Approvals

ASTA/UK, Aust. standards
Marine
NK/JAPAN
Lloyd R/UK
ABS/USA
GL/GERMANY
BV/France

Notes: ¹⁾ Load-break isolating switch only – no protection.
²⁾ MCCBs only.
³⁾ Chassis not available for XE225NC.
⁴⁾ Short time rating. Refer rating chart for complete technical data.
 Special low instantaneous magnetic, generator protection MCCBs available on request.

XH160PJ PowerBreaker series Ics = 50 kA

- ❑ Powerful interrupting capacities.
- ❑ Limitation of system damage.
- ❑ Unique contact structure.
- ❑ Icu = Ics = 50kA.
- ❑ Adjustable thermal, fixed magnetic trip.
- ❑ Adjustment range 63 - 100% of nominal current rating.
- ❑ Standards IEC947-2/AS3947-2.

*TemBreak
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XH160PJ (50 kA) 3 pole

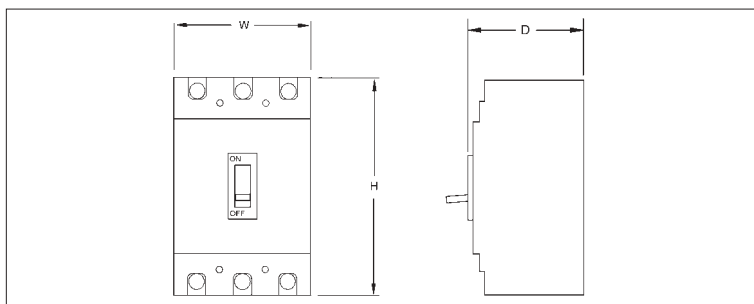
Ampere rating	Min	Max	Cat. No.
160	100	160	XH160PJ 160 3

XH160PJ (50 kA) 4 pole

160	100	160	XH160PJ 160 4
-----	-----	-----	----------------------

Dimensions (mm)

Description	Height	Width	Depth	kg
XH160PJ 3 pole	165	105	103	2.1
XH160PJ 4 pole	165	140	103	2.4



Short circuit capacity

AC use

Model	Icu	Ics	Voltage
XH160PJ	50 kA	50 kA	400/415V

DC use ¹⁾

Model	Icu	Ics	Voltage
XH160PJ	40 kA	—	250V DC

Cross reference table

Section/page

Accessories	6 - 13, 6 - 14
Selectivity & cascade	13 - 5 to 13 - 7
Application data	13
Characteristics curves	7 - 6
Motor starting	13
Connection & mounting details	7 - 33, 8 - 31, 32, 33
Detailed dimen. - MCCB only	7 - 33
- motor operators	7 - 34

Product extensions

Section/page

Chassis (TemWay, MHC, UHC)	6 - 2 to 6 - 7
TemCurve	13 - 43
Residual current relays	11

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2 Australia

Approvals

ASTA/UK, Aust. standards
Marine
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France

Notes: ¹⁾ Poles in series. Refer applications section 6.

Available on indent only.



DO NOT UNDER RATE!

Unlike some competitors Terasaki produce both thermal magnetic and microprocessor protection MCCBs.

- Thermal magnetic MCCBs respond directly to the heat produced by the *true r.m.s value* of the load current.
- Thermal magnetic MCCBs ensure *lifetime protection* irrespective of the harmonic distortion any future loads may cause.
- Thermal magnetic MCCBs protect up to the *infinite harmonic*.

Do not under rate thermal magnetic protection.

Thermal magnetic MCCBs are the superior protection when harmonics exist in a network.

For the record:

Terasaki microprocessor protection MCCBs range from 125A to 2500A; are to Category B (suitable for selectivity) and read up to the 19th harmonic - a distant vision for the competition, who rarely see past the 7th.

XS250 and XH250 NJ series

- Adjustment range 63 - 100% of nominal current rating.
- Standards AS 2184/AS 3947-2.
- Adjustable thermal, fixed magnetic trip.

XS250NJ (35 kA) 3 pole

Ampere rating	Min	Max	Cat. No.
160	100	160	XS250NJ 160 3
250	160	250	XS250NJ 250 3
250	Non-Auto (3 kA for 1sec) ^{1) 4)}		Refer page 5 - 46

XS250NJ (35 kA) 4 pole

160	100	160	XS250NJ 160 4
250	160	250	XS250NJ 250 4
250	Non-Auto (3 kA for 1sec) ^{1) 4)}		Refer page 5 - 46

XH250NJ (50 kA) 3 pole

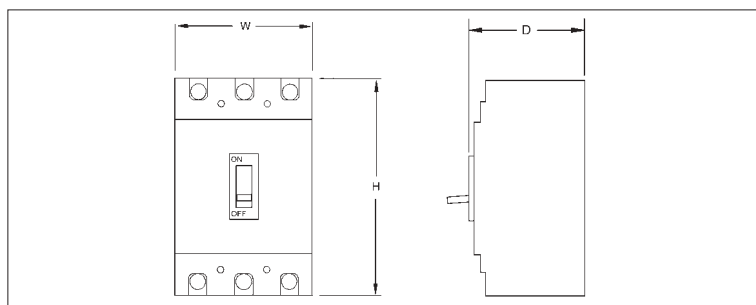
160	100	160	XH250NJ 160 3
250	160	250	XH250NJ 250 3

XH250NJ (50 kA) 4 pole

160	100	160	XH250NJ 160 4
250	160	250	XH250NJ 250 4

Dimensions (mm)

Description	Height	Width	Depth	kg
XS250NJ 3 pole	165	105	86	1.85
XH250NJ 3 pole	165	105	103	2.1
XS250NJ 4 pole	165	140	86	2.4
XH250NJ 4 pole	165	140	103	2.6



Notes: ¹⁾ Isolating switch only - no protection.
²⁾ MCCBs only.
³⁾ Poles in series. Refer applications Section 10.
⁴⁾ Short time rating. Refer rating chart for complete technical data.
 Special low instantaneous magnetic generator protection MCCBs available on request.



5

Bolt-on earth leakage module ELB 250, refer to Section 11 for further details.

Short circuit capacity

Model	I/C	Voltage
XS250NJ	35 kA (AS 2184)	415V 50Hz
XH250NJ	50 kA	415V 50Hz

DC use	I/C ³⁾	Voltage
XS250NJ	40 kA	250V DC
XH250NJ	40 kA	250V DC

Refer to ratings chart at the front of this section.
 For ratings to AS 3947-2 and AS 2184, and Ics/Icu.

Cross reference table

	Section/page
Accessories	6 - 13, 6 - 14
Selectivity & cascade	13 - 5 to 13 - 7
Application data	13
Characteristics curves	7 - 6
Motor starting	13
Connection & mounting details	7 - 31, 8 - 31, 32, 33
Detailed dimen. - MCCB only	7 - 31 to 7 - 34
- motor operators	7 - 31 to 7 - 34

Product extensions

	Section/page
Chassis (TemWay, MHC, UHC)	6 - 2 to 6 - 7
TemCurve	13 - 43
Residual current relays	11

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2/Australia
AS 2184-1990/Australia ²⁾
JIS C 8372/JAPAN
JEC 160/JAPAN

Approvals

ASTA/UK, Aust. standards
Marine
NK/JAPAN
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France
DNV NORWAY

XH250PJ and XH400PJ PowerBreaker series Ics = 50 kA

- ❑ Powerful interrupting capacities.
- ❑ Limitation of system damage.
- ❑ Unique contact structure.
- ❑ Adjustable thermal and magnetic trips.
- ❑ Thermal adjustment range 63 - 100% of nominal current rating.
- ❑ Standards IEC947-2/AS3947-2.



*TemBreak
Plus*

5

XH250PJ and XH400PJ (65 kA) 3 pole

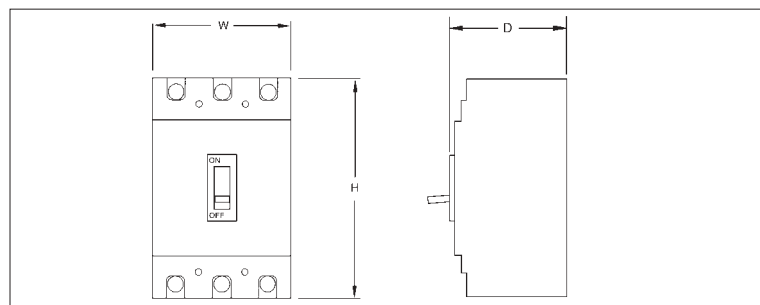
Ampere rating	Min	Max	Cat. No.
160 (400AF)	100	160	XH250PJ 160 3
250 (400AF)	160	250	XH250PJ 250 3
400	250	400	XH400PJ 400 3

XH250PJ and XH400PJ (65 kA) 4 pole

160 (400AF)	100	160	XH250PJ 160 4
250 (400AF)	160	250	XH250PJ 250 4
400	250	400	XH400PJ 400 4

Dimensions (mm)

Description		Height	Width	Depth	kg
XH250/400PJ	3 pole	260	140	103	4.7
XH250/400PJ	4 pole	260	185	103	6.1



Short circuit capacity

AC use

Model	Icu	Ics	Voltage
XH250/400PJ	65 kA	50 kA	400/415V

DC use ¹⁾

Model	Icu	Ics	Voltage
XH250/400PJ	40 kA	—	250V DC

Cross reference table

	Section/page
Accessories	6 - 15, 6 - 16
Selectivity & cascade	13 - 5 to 13 - 7
Application data	13
Characteristics curves	7 - 7
Connection & mounting details	7 - 36, 8 - 31, 32, 33
Detailed dimensions	7 - 36
- MCCB only	7 - 38
- motor operators	

Product extensions

	Section/page
Chassis (TemWay, MHC, UHC)	6 - 4 to 6 - 7
TemCurve	13 - 43
Residual current relays	11

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2 Australia

Approvals

ASTA/UK, Aust. standards
Marine
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France

Notes: ¹⁾ Poles in series. Refer applications section 10.

Available on indent only.

XS400 series thermal magnetic type

- Adjustment range 63 - 100% of nominal current rating.
- Standards AS 2184/AS 3497-2.
- Adjustable thermal and magnetic trip.



XS400CJ (35 kA) 3 pole

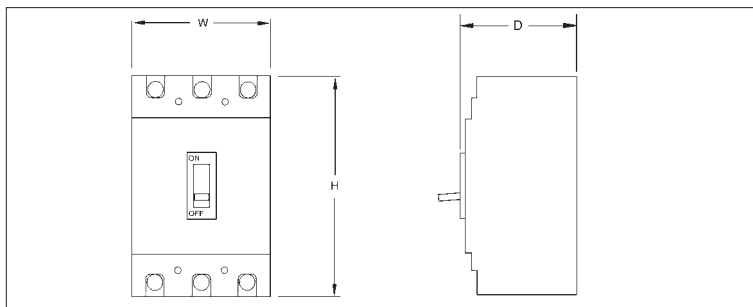
Ampere rating	Min	Max	Cat. No.
250	160	250	XS400CJ 250 3
400	250	400	XS400CJ 400 3
400	Non-Auto (5 kA for 0.3sec) ¹⁾		Refer page 5 - 46

XS400NJ (50 kA) 3 pole

250	160	250	XS400NJ 250 3
400	250	450	XS400NJ 400 3

Dimensions (mm)

Description		Height	Width	Depth	kg
XS400CJ/NJ	3 pole ³⁾	260	140	103	4.7



- Notes:** ¹⁾ Load-break isolating switch only – no protection.
²⁾ MCCBs only.
³⁾ Refer page 9 - 41 for 4 pole dimensions.
For stock of 4 pole models refer to page 3 - 15.
⁴⁾ Poles in series. Refer applications Section 10.

Short circuit capacity

Model	I/C	Voltage
XS400CJ	35 kA (AS 2184)	415V 50Hz
XS400NJ	50 kA	415V 50Hz

DC use	I/C ⁴⁾	Voltage
XS400CJ	40 kA	250V DC
XS400NJ	40 kA	250V DC

Refer to ratings chart at the front of this section.
For ratings to AS 3947-2 and AS 2184, and Ics/Icu.

Cross reference table

	Section/page
Accessories	6 - 15, 6 - 16
Selectivity & cascade	13 - 5 to 13 - 7
Application data	13
Characteristics curves	7 - 7
Motor starting	13
Connection & mounting details	7 - 36, 8 - 31, 32, 33
Detailed dimen. - MCCB only	7 - 36
- motor operators	7 - 38

Product extensions

	Section/page
Chassis (TemWay, MHC, UHC)	6 - 4 to 6 - 7
TemCurve	13 - 43
Residual current relays	11

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2/Australia
AS 2184-1990/Australia ²⁾
JIS C 8372/JAPAN
JEC 160/JAPAN

Approvals

ASTA/UK, Aust. standards
Marine
NK/JAPAN
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France
DNV NORWAY

TemBreak *Plus*

For High Demand
Selectivity Applications



- **P**owerful interrupting capacities
- **L**asting reliability
- **U**nique contact structure
- **S**electivity enhanced MCCBs

Enhanced Switchgear TemBreak *Plus* MCCBs Ics = Icu = 50kA & 85kA, and Selectivity Series SE

The new Terasaki **TemBreak *Plus*** series of MCCBs are designed to provide superior performance in two main areas:

Selectivity: The need for a continuous and reliable power supply places increased emphasis on selectivity requirements in today's electrical distribution system. The Selectivity series utilises microprocessor based protection, giving enhanced selectivity. This ensures selectivity between the upstream and downstream MCCBs. Selection data can be found in sections 4 and 10.

Fault Interrupting Capacities: The majority of distribution systems are designed to an ultimate short circuit rating (Icu). A Icu rated MCCB provides the optimum protection in terms of safe and economical selection. However, certain applications may require protection which is designed to the more onerous short circuit rating (Ics). The Terasaki TemBreak *Plus* range can provide a range of MCCBs with superior Ics ratings up to 85kA at 440V AC. Refer section 4.

Icu = O-CO 2 Full Short Circuits **Ics** = O-CO-CO 3 Full Short Circuits

Following the introduction of the New TemBreak *Plus* range of MCCBs, there are now 4 main groupings as follows:

Series name	MCCB types	Application
Standard TemBreak series	XS/XH/XM...CS/NS, CJ/NJ, NE, PB	Wide ranging general applications
New TemBreak <i>Plus</i>	MCCB types	Application
PowerBreaker series	XS/XH...PJ, and PE	Ics = 50kA minimum
LimiterBreaker series	TL...NJ	Ics = 50kA - 85kA
Selectivity series	XS/XH...SE	Improved selectivity (Discrimination) applications

Selectivity
and
current
limiting
types



5

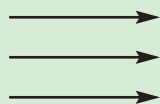
Selectivity Series

Cat. No.	XS400SE	XH400SE	XS630SE	XH630SE	XS800SE	XH800SE	XS1250SE	XS1600SE
No. of poles	3,4	3,4	3,4	3,4	3,4	3,4	3,4	3,4
Ampere frame	400	400	630	630	800	800	1250	1600
Rated current in (Amp)	250, 400	250, 400	630	630	800	800	1000 1250	1600

Rated AC breaking capacity

AS 3947-2	690V	18/9	20/10	20/10	20/10	20/10	20/10	25/19	45/34
IEC 947-2	500V	30/15	42/21	35/18	42/21	35/18	42/21	45/34	65/49
Icu/Ics kA	440V	42/21	65/33	50/25	65/33	50/25	65/33	65/49	85/64
	415V	50/25	65/33	50/25	65/33	50/25	65/33	65/49	85/64
	400V	50/25	65/33	50/25	65/33	50/25	65/33	85/64	100/75
Microprocessor	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dimensions	4P	185x260x103	185x260x103	280x273x103	280x273x103	280x273x103	280x273x103	280x370x120	280x370x140
W-H-D mm	3P	140x260x103	140x260x103	210x273x103	210x273x103	210x273x103	210x273x103	210x370x120	210x370x140

The Complete
TemBreak *Plus*
Line up...



PowerBreaker Series Ics = 50kA

Selectivity Series

LimiterBreaker Series Ics = 65-85kA



Details Section 5

XS400SE and XH400SE selectivity series electronic

- ❑ SE Upstream Selectivity breakers.
- ❑ SE series provides enhanced selectivity.
- ❑ 3:1 ratio between upstream & downstream MCCBs.
- ❑ Ics rating is 50% of Icu.
- ❑ I²t switch to assist in obtaining total selectivity.
- ❑ True RMS monitoring.
- ❑ Electronic trip unit with Long, Short and Instantaneous adjustments.
- ❑ Adjustment range 50 - 100% of nominal current rating.
- ❑ Standards IEC947-2/AS3947-2.



*TemBreak
Plus*

XS400SE (50kA) 3 pole

Ampere rating	Min	Max	Cat. No.
250	125	250	XS400SE 250 3
400	250	400	XS400SE 400 3

XH400SE (65kA) 3 pole

250	125	250	XH400SE 250 3
400	250	400	XH400SE 400 3

XS400SE (50kA) 4 pole

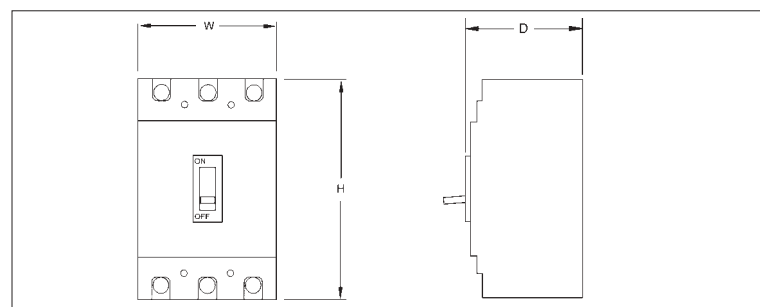
Ampere rating	Min	Max	Cat. No.
250	125	250	<i>i</i> XS400SE 250 4
400	250	400	<i>i</i> XS400SE 400 4

XH400SE (65kA) 4 pole

250	125	250	<i>i</i> XH400SE 250 4
400	250	400	<i>i</i> XH400SE 400 4

Dimensions (mm)

Description		Height	Width	Depth	kg
XS/XH400SE	3 pole	260	140	103	5
XS/XH400SE	4 pole	260	185	103	6.2



i Available on indent only.

Short circuit capacity

AC use			
Model	Icu	Ics	Voltage
XS400SE	50 kA	25 kA	400/415V
XH400SE	65 kA	33 kA	400/415V

OCR options (factory fitted)

Description	Code
Pre-trip alarm	LSIP
Fault indicators	FI
Special LTD curves	-

Cross reference table

	Section/page
Accessories	6 - 15, 6 - 16
Selectivity & cascade	13 - 5 to 13 - 7
Application data	13
Characteristics curves	7 - 12
Motor Starting	13
Connection & mounting details	7 - 36, 8 - 31, 32, 33
Detailed dimensions	
- MCCB only	7 - 36
- motor operators	7 - 38

Product extensions

	Section/page
Chassis (MHC, UHC)	6 - 4 to 6 - 7
OCR checker	7 - 23
OCR adjustments	7 - 11 to 7 - 22
TemCurve	13 - 43
Residual current relays	11

Base standards

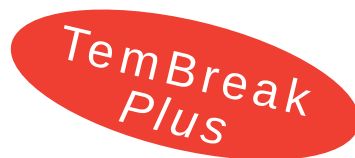
IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2 Australia

Approvals

ASTA/UK, Aust. standards
Marine
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France

XH400PE PowerBreaker series Ics = 50 kA

- ❑ Current limiting.
- ❑ True RMS monitoring.
- ❑ I't switch to assist in obtaining total selectivity.
- ❑ Powerful interrupting capacities.
- ❑ Limitation of system damage.
- ❑ Unique contact structure.
- ❑ Electronic trip unit with Long, Short and Instantaneous adjustments.
- ❑ Adjustment range 50 - 100% of nominal current rating.
- ❑ Standards IEC947-2/AS3947-2.



5

XH400PE (65 kA) 3 pole

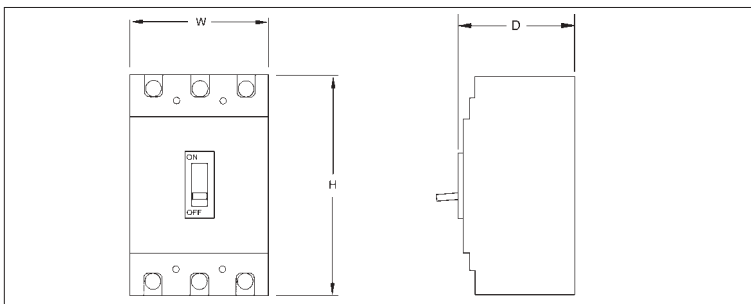
Ampere rating	Min	Max	Cat. No.
250	125	250	XH400PE 250 3
400	250	400	XH400PE 400 3

XH400PE (65 kA) 4 pole

250	125	250	 XH400PE 250 4
400	250	400	 XH400PE 400 4

Dimensions (mm)

Description	Height	Width	Depth	kg
XH400PE 3 pole	260	140	103	5
XH400PE 4 pole	260	185	103	6.2



Notes: ¹⁾ Mounted externally.

 Available on indent only.

Short circuit capacity

AC use

Model	Icu	Ics	Voltage
XH400PE	65 kA	50 kA	400/415V

OCR options (factory fitted)

Description	Code
Pre-trip alarm	LSIP
Fault indicators ¹⁾	FI
Special LTD curves	-

Cross reference table

	Section/page
Accessories	6 - 15, 6 - 16
Selectivity & cascade	13 - 5 to 13 - 7
Application data	13
Characteristics curves	7 - 12
Motor Starting	13
Connection & mounting details	7 - 36, 8 - 31, 32, 33
Detailed dimensions	
- MCCB only	7 - 36
- motor operators	7 - 38

Product extensions

	Section/page
Chassis (MHC, UHC)	6 - 4 to 6 - 7
OCR checker	7 - 23
OCR adjustments	7 - 11 to 7 - 22
TemCurve	13 - 43
Residual current relays	11

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2 Australia

Approvals

ASTA/UK, Aust. standards
Marine
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France



DO NOT DERATE!

Unlike some competitor products, TemBreak MCCBs can be installed within a '*50°C ambient temperature*' environment, with no need to derate.
In general, TemBreak MCCBs are much *cooler* by design.

Terasaki MCCBs are designed to Japanese and IEC standards for MCCBs. The Japanese standard states that the maximum permissible temperature rise on the terminals is 60°C. This is *much lower* than the permissible 70°C from the IEC standard.

On average this gives TemBreak MCCBs a '*15% temperature advantage*'. Pretty good, considering that overheating causes the majority of switchgear faults.

Whose getting hot and bothered now? Not us!

XS630 and XS800 series thermal magnetic type

- Adjustable range 63 - 100% of nominal current rating.
- Standards AS 2184/AS 3947-2.
- Adjustable thermal, fixed magnetic type.

XS630CJ (45 kA) 3 pole

Ampere rating	Min	Max	Cat. No.
400	250	400	XS630CJ 400 3
630	400	630	XS630CJ 630 3
630	Non-Auto (9.6 kA for 0.3sec) ^{1) 4)}		Refer page 5 -46

XS630NJ (65 kA) 3 pole

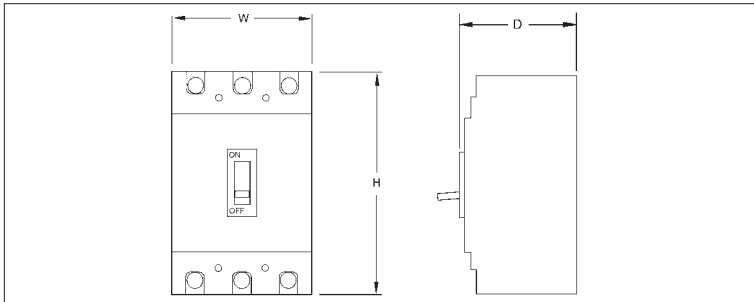
400	250	400	XS630NJ 400 3
630	400	630	XS630NJ 630 3

XS800NJ (65 kA) 3 pole³⁾

800	500	800	XS800NJ 800 3
800	Non-Auto (9.6 kA for 0.3sec) ^{1) 4)}		Refer page 5 - 46

Dimensions (mm)

Description		Height ²⁾	Width	Depth	kg
XS630NJ/CJ	3 pole	273	210	103	9.0
XS800NJ	3 pole	273	210	103	9.4



Notes: ¹⁾ Load-break isolating switch only - no short circuit protection.
²⁾ Height excludes attached busbar.
³⁾ For stocked 4 pole models refer to page TBA.
⁴⁾ MCCBs only.
Short time rating. Refer ratings chart for complete details.
⁵⁾ Poles is series. Refer applications Section 10.
Refer page TBA for 4 pole dimensions.



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Short circuit capacity

Model	I/C	Voltage
XS630CJ	45 kA (AS 2184)	415V 50Hz
XS630NJ	65 kA (AS 2184)	415V 50Hz
XS800NJ	65 kA (AS 2184)	415V 50Hz

Refer to ratings chart at the front of this section.
For ratings to AS 3947-2 and AS 2184, and Ics/Icu.

DC use	I/C ⁵⁾	Voltage
XS630CJ	40 kA	250V DC
XS630NJ	40 kA	250V DC
XS800NJ	40 kA	250V DC

Cross reference table

	Section/page
Accessories	6 - 17, 6 - 18
Selectivity & cascade	13 - 5 to 13 - 7
Application data	13
Characteristics curves	7 - 7
Motor starting	13
Connection & mounting details	7 - 39, 8 - 31, 32, 33
Detailed dimensions	
- MCCB only	7 - 39, 7 - 40
- motor operators	7 - 41

Product extensions

	Section/page
Chassis (MHC, UHC)	6 - 4 to 6 - 7
TemCurve	13 - 43
Residual current relays	11

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2/Australia
AS 2184-1990/Australia ⁴⁾
JIS C 8372/JAPAN
JEC 160/JAPAN

Approvals

ASTA/UK, Aust. standards
Marine
NK/JAPAN
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France
DNV NORWAY

XH630PJ and XH800PJ PowerBreaker series Ics = 50 kA

- Powerful interrupting capacities.
- Limitation of system damage.
- Unique contact structure.
- Adjustable thermal and magnetic trips.
- Thermal adjustment range 63 - 100% of nominal current rating.
- Standards IEC947-2/AS3947-2.



**TemBreak
Plus**

XH630/800PJ (85 kA) 3 pole

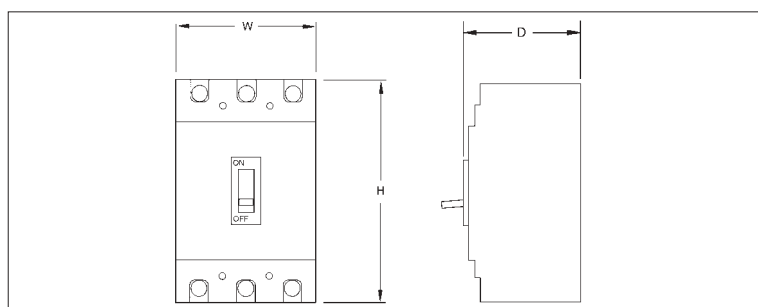
Ampere rating	Min	Max	Cat. No.
400	250	400	XH630PJ 400 3
630	400	630	XH630PJ 630 3
800	500	800	XH800PJ 800 3

XH630/800PJ (85 kA) 4 pole

Ampere rating	Min	Max	Cat. No.
400	250	400	 XH630PJ 400 4
630	400	630	 XH630PJ 630 4
800	500	800	 XH800PJ 800 4

Dimensions (mm)

Description		Height ¹⁾	Width	Depth	kg
XH630/800PJ	3 pole	273	210	103	9.0
XH630/800PJ	4 pole	273	280	103	11.5



Notes: ¹⁾ Height excludes attached busbar.

²⁾ Poles is series. Refer applications section 10.

 Available on indent only.

Short circuit capacity

AC use

Model	Icu	Ics	Voltage
XH630/800PJ	100 kA	50 kA	400V AC
XH630/800PJ	85 kA	50 kA	415V AC

DC use ²⁾

Model	Icu	Ics	Voltage
XH630/800PJ	40 kA	—	250V DC

Cross reference table

Section/page

Accessories	6 - 17, 6 - 18
Selectivity & cascade	13 - 5 to 13 - 7
Application data	13
Characteristics curves	7 - 7
Motor starting	13
Connection & mounting details	7 - 39, 8 - 31, 32, 33
Detailed dimensions	
- MCCB only	7 - 39, 7 - 40
- motor operators	7 - 41

Product extensions

Section/page

Chassis (MHC, UHC)	6 - 4 to 6 - 7
TemCurve	13 - 43
Residual current relays	11

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2 Australia

Approvals

ASTA/UK, Aust. standards
Marine
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France

XH630PE and XH800PE PowerBreaker series Ics = 50 kA electronic

- ❑ Current limiting.
- ❑ True RMS monitoring.
- ❑ I't switch to assist in obtaining total selectivity.
- ❑ Powerful interrupting capacities.
- ❑ Limitation of system damage.
- ❑ Unique contact structure.
- ❑ Electronic trip unit with Long, Short and Instantaneous adjustments.
- ❑ Adjustment range 50 - 100% of nominal current rating.
- ❑ Standards IEC947-2/AS3947-2.



5

TemBreak Plus

XH630PE (65 kA) 3 pole

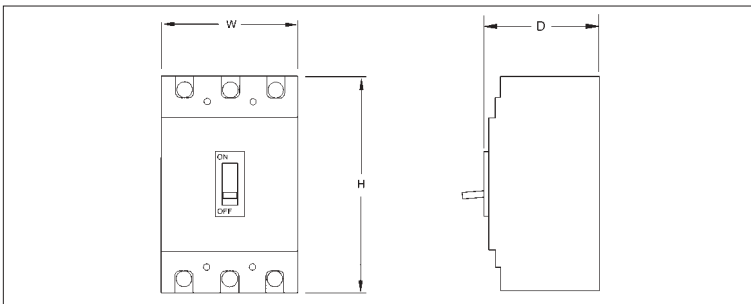
Ampere rating	Min	Max	Cat. No.
630	315	630	XH630PE 630 3

XH800PE (65 kA) 3 pole

800	400	800	XH800PE 800 3
-----	-----	-----	----------------------

Dimensions (mm)

Description		Height ¹⁾	Width	Depth	kg
XH630PE	3 pole	273	210	103	9.6
XH630PE	4 pole	273	280	103	12.2
XH800PE	3 pole	273	210	103	9.7
XH800PE	4 pole	273	280	103	12.5



Notes: ¹⁾ Height excludes attached busbar.

²⁾ Includes factory fitted OCR controller specify voltage 240V or 110V AC.

i Available on indent only.

Short circuit capacity

AC use

Model	Icu	Ics	Voltage
XH630/800PE	65 kA	50 kA	400/415V

OCR options (factory fitted)

Description	Code
Ground fault trip	LSIG
Pre-trip alarm	LSIP
Fault indicators	FI
Special LTD curves	-

Cross reference table

Section/page

Accessories	6 - 17, 6 - 18
Selectivity & cascade	13 - 5 to 13 - 7
Application data	13
Characteristics curves	7 - 12
Motor starting	13
Connection & mounting details	7 - 39, 8 - 31, 32, 33
Detailed dimensions	
- MCCB only	7 - 39, 7 - 40
- motor operators	7 - 41

Product extensions

Section/page

Chassis (MHC, UHC)	6 - 4 to 6 - 7
TemCurve	13 - 43

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2 Australia

Approvals

ASTA/UK, Aust. standards
Marine
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France

XS and XH630/800SE selectivity series electronic

- ❑ SE Upstream Selectivity breakers.
- ❑ SE series provides enhanced selectivity.
- ❑ 3:1 ratio between upstream & downstream MCCBs.
- ❑ Ics rating is 50% of Icu.
- ❑ I²t switch to assist in obtaining total selectivity.
- ❑ True RMS monitoring.
- ❑ Electronic trip unit with Long, Short and Instantaneous adjustments.
- ❑ Adjustment range 50 - 100% of nominal current rating.
- ❑ Standards IEC947-2/AS3947-2.



TemBreak Plus

XS630SE (50 kA) 3 pole

Ampere rating	Min	Max	Cat. No.
630	315	630	XS630SE 630 3

XH800SE (65 kA) 3 pole

800	400	800	XH800SE 800 3
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XS630SE (50 kA) 4 pole

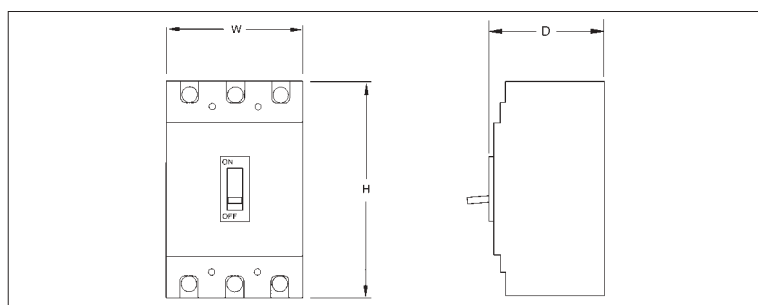
Ampere rating	Min	Max	Cat. No.
630	315	630	 XS630SE 630 4

XH800SE (65 kA) 4 pole

800	400	800	 XH800SE 800 4
-----	-----	-----	---

Dimensions (mm)

Description	Height ²⁾	Width	Depth	kg
XS/XH630SE 3 pole	273	210	103	9.6
XS/XH630SE 4 pole	273	280	103	12.2
XS/XH800SE 3 pole	273	210	103	9.7
XS/XH800SE 4 pole	273	280	103	12.5



Notes: ¹⁾ Includes factory fitted OCR controller specify voltage 240V or 110V AC.

²⁾ Height excludes attached busbar.

 Available on indent only.

Short circuit capacity

AC use

Model	Icu	Ics	Voltage
XS630/800SE	50 kA	25 kA	400/415V
XH630/800SE	65 kA	33 kA	400/415V

OCR options (factory fitted)

Description	Code
Ground fault trip ¹⁾	LSIG
Pre-trip alarm	LSIP
Fault indicators	FI
Special LTD curves	-

Cross reference table

	Section/page
Accessories	6 - 17, 6 - 18
Selectivity & cascade	13 - 5 to 13 - 7
Application data	13
Characteristics curves	7 - 12
Motor starting	13
Connection & mounting details	7 - 39, 8 - 31, 32, 33
Detailed dimensions	
- MCCB only	7 - 39, 7 - 40
- motor operators	7 - 41

Product extensions

	Section/page
Chassis (MHC, UHC)	6 - 4 to 6 - 7
TemCurve	13 - 43
Automatic transfer switches	9
Residual current relays	11

Base standards

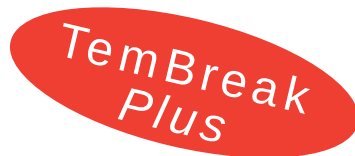
IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2 Australia

Approvals

ASTA/UK, Aust. standards
Marine
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France

XS1250SE and XS1600SE selectivity series electronic

- ❑ SE Upstream Selectivity breakers.
- ❑ SE series provides enhanced selectivity.
- ❑ 3:1 ratio between upstream & downstream MCCBs.
- ❑ Ics rating is 75% of Icu.
- ❑ I't switch to assist in obtaining total selectivity.
- ❑ True RMS monitoring.
- ❑ Electronic trip unit with Long, Short and Instantaneous adjustments.
- ❑ Adjustment range 50 - 100% of nominal current rating.
- ❑ Standards IEC947-2/AS3947-2.



5

XS1250SE (65 kA) 3 pole

Ampere rating	Min	Max	Cat. No.
1000	500	1000	XS1250SE 1000 3FC
1250	625	1250	XS1250SE 1250 3FC

XS1600SE (85 kA) 3 pole

1600	800	1600	XS1600SE 1600 3FC
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XS1250SE (50 kA) 4 pole

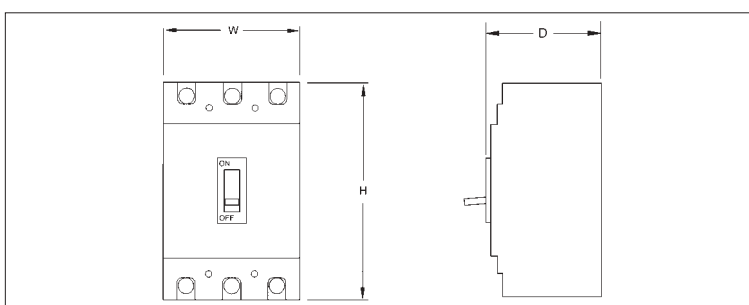
Ampere rating	Min	Max	Cat. No.
1000	500	1000	XS1250SE 1000 4FC
1250	625	1250	XS1250SE 1250 4FC

XS1600SE (85 kA) 4 pole

1600	800	1600	XS1600SE 1600 4FC
------	-----	------	-------------------

Dimensions (mm)

Description		Height ¹⁾	Width	Depth	kg
XS1250SE	3 pole	370	210	120	22
XS1600SE	3 pole	370	210	140	27
XS1250SE	4 pole	370	280	120	28
XS1600SE	4 pole	370	280	140	35



Short circuit capacity

AC use			
Model	Icu	Ics	Voltage
XS1250SE	65 kA	49 kA	400/415V
XS1600SE	85 kA	64 kA	400/415V

OCR options (factory fitted)

Description	Code
Ground fault trip	LSIG
Pre-trip alarm	LSIP
Fault indicators	FI
Special LTD curves	-

Cross reference table

	Section/page
Accessories	6 - 19, 6 - 20
Selectivity & cascade	13 - 5 to 13 - 7
Application data	13
Characteristics curves	7 - 12
Motor starting	13
Connection & mounting details	7 - 42, 7 - 44
Detailed dimensions	
- MCCB only	7 - 42, 7 - 44
- motor operators	7 - 43, 7 - 45
Connection terminal data 1250/1600A	8 - 31, 32, 33

Product extensions

	Section/page
Chassis (MHC, UHC) ²⁾	6 - 4 to 6 - 7
TemCurve	13 - 43
Residual current relays	11

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2 Australia

Approvals

ASTA/UK, Aust. standards
Marine
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France

Notes: ¹⁾ Height excludes attached busbar.
²⁾ For XS1250SE only.

XS2000 and XS2500 series electronic type

- ❑ Current limiting.
- ❑ True RMS monitoring.
- ❑ I²t switch to assist in obtaining selectivity.
- ❑ Powerful interrupting capacities.
- ❑ Limitation of system damage.
- ❑ Unique contact structure.
- ❑ Electronic trip unit with Long, Short & Instantaneous adjustments.
- ❑ Adjustment range 50 - 100% of nominal current rating.
- ❑ Standards AS 2184/AS 3947-2.



5

XS2000NE (100 kA) 3 pole

Ampere rating	Min	Max	Cat. No.
2000	1000	2000	XS2000NE 2000 3 RC
2000	Non-Auto (35kA for 0.3sec) ^{1) 2)}		Refer page 5 -46

XS2000NE (100 kA) 4 pole

2000	1000	2000	XS2000NE 2000 4 RC
2000	Non-Auto (35kA for 0.3sec) ^{1) 2)}		Refer page 5 -46

XS2500NE (100 kA) 3 pole

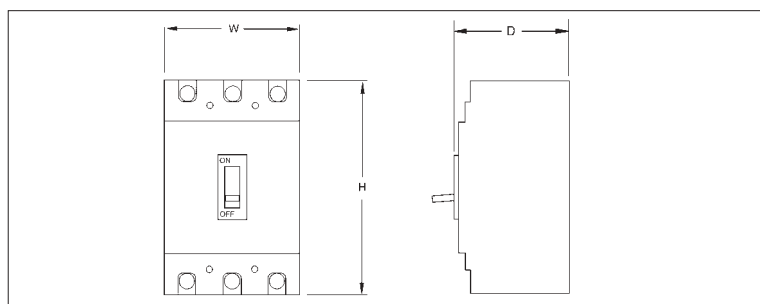
2500	1250	2500	XS2500NE 2500 3 RC
2500	Non-Auto (35kA for 0.3sec) ^{1) 2)}		Refer page 5 -46

XS2500NE (100 kA) 4 pole

2500	1250	2500	XS2500NE 2500 4 RC
2500	Non-Auto (35kA for 0.3sec) ^{1) 2)}		Refer page 5 -46

Dimensions (mm)

Description	Poles	Height	Width	Depth	kg
XS2000NE	3	450	320	185	54
XS2500NE	3	450	320	185	62.5
XS2000NE	4	450	429	185	67
XS2500NE	4	450	429	185	78.2



Notes: ¹⁾ Short time rating. Refer ratings chart for complete technical data.

²⁾ Load-break isolating switch only – no short circuit protection.

³⁾ MCCBs only.

For DC use refer NHP.

Short circuit capacity

Model	I/C	Voltage
XS2000NE	100 kA (AS 2184)	415V 50Hz
XS2500NE	100 kA (AS 2184)	415V 50Hz

Refer to ratings chart at the front of this section.
For ratings to AS 3947-2 and AS 2184, and Ics/Icu.

OCR options (factory fitted)

Description	Code
Ground fault trip	LSIG
Pre-trip alarm	LSIP
Fault indicators	FIP
HI inst. models	-
Special LTD curves	-

Cross reference table

	Section/page
Accessories	6 - 21, 6 - 22
Selectivity & cascade	13 - 5 to 13 - 7
Application data	13
Characteristics curves	7 - 12
Connection & mounting details	7 - 47, 7 - 48
Detailed dimensions	
- MCCB only	7 - 47, 7 - 48
- motor operators	7 - 49
OCR setting details	7 - 11 to 7 - 23
Connection terminal data 2000/2500A	8 - 32, 33

Product extensions

	Section/page
OCR checker	7 - 23
TemCurve	13 - 43

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2/Australia
AS 2184-1990/Australia ³⁾
JIS C 8372/JAPAN
JEC 160/JAPAN

Approvals

ASTA/UK, Aust. standards
Marine
NK/JAPAN
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France

High fault series thermal magnetic type

- Standard AS 2184/AS 3947-2.
- Interrupting capacity @415V 120kA.
- TL breakers are suitable for high fault high current limiting applications.
- Fixed thermal magnetic trip unit.

TL30F (120 kA) 3 pole

Ampere rating	Cat. No.
15	TL30F 15 3P
20	TL30F 20 3P
30	TL30F 30 3P

TL100F (120 kA) 3 pole

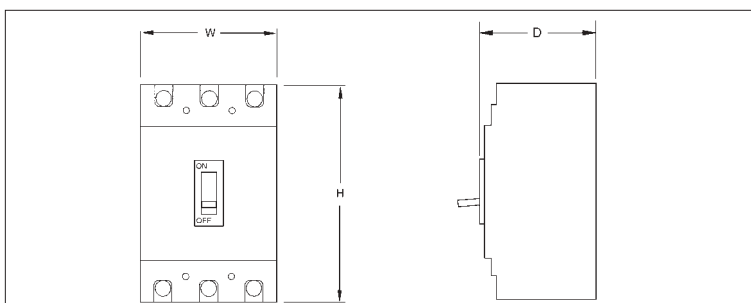
15	TL100F 15 3P
20	TL100F 20 3P
30	TL100F 30 3P
40	TL100F 40 3P
50	TL100F 50 3P
60	TL100F 60 3P
75	TL100F 75 3P
100	TL100F 100 3P

TL100C (180 kA) 3 pole

15	TL100C 15 3P
20	TL100C 20 3P
30	TL100C 30 3P
40	TL100C 40 3P
50	TL100C 50 3P
60	TL100C 60 3P
75	TL100C 75 3P
100	TL100C 100 3P

Dimensions (mm)

Description	Height	Width	Depth	kg
TL30F	155	90	86	1.3
TL100F	165	105	125	3.2
TL100C	230	110	133	5.0



5

Short circuit capacity

Model	I/C	Voltage
TL30F	120 kA	415V 50Hz
TL100F	120 kA	415V 50Hz
TL100C	180 kA	415V 50Hz

D/C use	I/C	I/C
TL100F	40 kA	250V DC

Refer to ratings chart at the front of this section.
For ratings to AS 3947-2 and AS 2184, and Ics/Icu.

Cross reference table

	Section/page
Accessories	6 - 10, 6 - 24
Application data	13
Characteristics curves	7 - 9, 10
Motor starting (Type 2)	13
Detailed dimensions	7 - 26, 7 - 27

Product extensions

	Section/page
TemCurve	13 - 43
Residual current relays	11

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2/Australia
AS 2184-1990/Australia ¹⁾
JIS C 8372/JAPAN
JEC 160/JAPAN

Approvals

ASTA/UK, Aust. standards
Marine
NK/JAPAN
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France

Note: ¹⁾ MCCBs only.

TL100NJ LimitorBreaker series type Ics = 85 kA

- ❑ NEW series TL breaker.
- ❑ Two fast break contacts per pole.
- ❑ Powerful interrupting capacities.
- ❑ Provides limitation of system damage during a fault.
- ❑ Icu = Ics = 85kA.
- ❑ Variable thermal, fixed magnetic trip.
- ❑ Adjustment range 63 – 100% of nominal current rating.
- ❑ Can be used for selectivity applications.
- ❑ 3 or 4 pole types available.
- ❑ Standards IEC947-2/AS3947-2.



5

TemBreak Plus

TL100NJ (85 kA) 3 pole

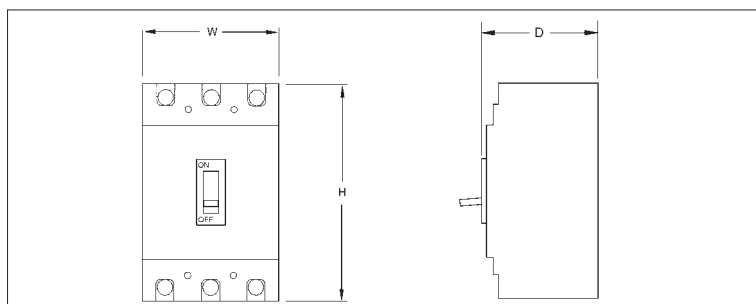
Ampere rating	Min	Max	Cat. No.
20	12.5	20	TL100NJ 20 3
32	20	32	TL100NJ 32 3
50	32	50	TL100NJ 50 3
63	40	63	TL100NJ 63 3
100	63	100	TL100NJ 100 3

TL100NJ (85 kA) 4 pole

20	12.5	20	TL100NJ 20 4
32	20	32	TL100NJ 32 4
50	32	50	TL100NJ 50 4
63	40	63	TL100NJ 63 4
100	63	100	TL100NJ 100 4

Dimensions (mm)

Description		Height	Width	Depth	kg
TL100NJ	3 pole	235	90	86	2.2
TL100NJ	4 pole	235	120	86	2.7



Notes: ¹⁾ Poles in series. Refer applications section 10.

Available on indent only.

Short circuit capacity

AC use

Model	Icu	Ics	Voltage
TL100NJ	85 kA	85 kA	400/415V

DC use ¹⁾

Model	Icu	Ics	Voltage
TL100NJ	40 kA	–	250V DC

Cross reference table

	Section/page
Accessories	6 - 10, 6 - 11
Application data	13
Characteristics curves	7 - 9
Motor starting (Type 2)	13
Detailed dimensions - MCCB only	7 - 27

Product extensions

	Section/page
TemCurve	13 - 43
Residual current relays	11

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2 Australia

Approvals

ASTA/UK, Aust. standards
Marine
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France

High fault series thermal magnetic type

- Standard AS 2184 and AS 3947-2.
- High fault series current limiting thermal magnetic type.
- Fixed thermal magnetic trip unit.

TL225F (120 kA) 3 pole

Ampere
rating

Cat. No.

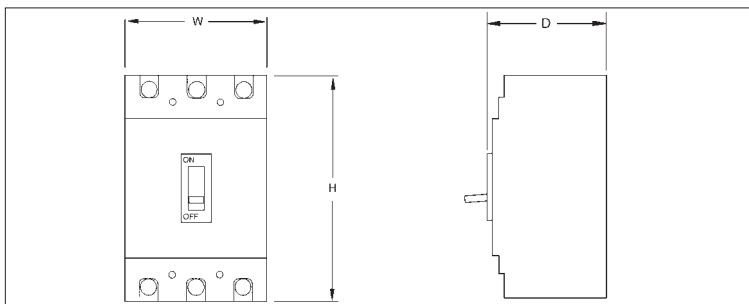
125	 TL225F 125 3P
150	 TL225F 150 3P
175	 TL225F 175 3P
200	 TL225F 200 3P
225	 TL225F 225 3P

TL225B (180 kA) 3 pole

125	 TL225B 125 3P
150	 TL225B 150 3P
175	 TL225B 175 3P
200	 TL225B 200 3P
225	 TL225B 225 3P

Dimensions (mm)

Description	Height	Width	Depth	kg
TL225F	260	140	133	6
TL225B	260	140	133 + 46	9.3



5

Short circuit capacity

Model	I/C	Voltage
TL225F	120 kA	415V 50Hz
TL225B	180 kA	415V 50Hz

DC use	I/C	Voltage
TL225F	40 kA	250V DC
TL225B	40 kA	250V DC

Refer to ratings chart at the front of this section.
For ratings to AS 3947-2 and AS 2184, and Ics/Icu.

Cross reference table

	Section/page
Accessories	6 - 24
Application data	13 - 43
Characteristics curves	refer NHP
Dimensions	7 - 35

Product extensions

	Section/page
TemCurve	13
Residual current relays	11

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2/Australia
AS 2184-1990/Australia ¹⁾
JIS C 8372/JAPAN
JEC 160/JAPAN

Approvals

ASTA/UK, Aust. standards
Marine
NK/JAPAN
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France

Notes: ¹⁾ MCCBs only.
 Available on indent only.

TL250NJ LimitorBreaker series

Ics = 85 kA

- ❑ NEW series TL breaker.
- ❑ Two fast break contacts per pole.
- ❑ Powerful interrupting capacities.
- ❑ Provides limitation of system damage during a fault.
- ❑ Icu = Ics = 85kA at 415V.
- ❑ Variable thermal, and magnetic trip.
- ❑ Adjustment range 63 – 100% of nominal current rating.
- ❑ Can be used for selectivity applications.
- ❑ 3 or 4 pole types available.
- ❑ Standards IEC947-2/AS3947-2.



TemBreak Plus

5

TL250NJ (85 kA) 3 pole

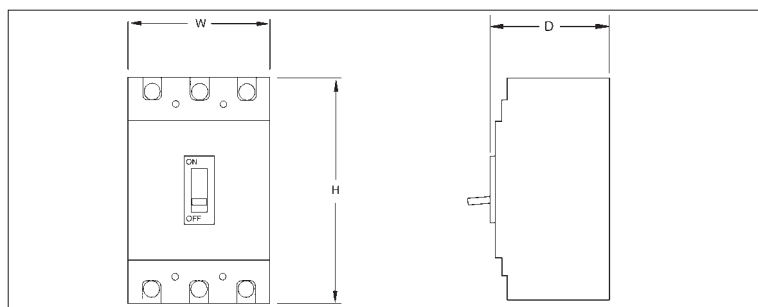
Ampere rating	Min	Max	Cat. No.
160	100	160	TL250NJ 160 3
250	160	250	TL250NJ 250 3

TL250NJ (65 kA) 4 pole

160	100	160	TL250NJ 160 4
250	160	250	TL250NJ 250 4

Dimensions (mm)

Description	Height	Width	Depth	kg
TL250NJ 3 pole	360	140	103	7.1
TL250NJ 4 pole	360	185	103	9.1



Short circuit capacity

AC use			
Model	Icu	Ics	Voltage
TL250NJ	100 kA	100 kA	400V AC
TL250NJ	85 kA	85 kA	415V AC

DC use ¹⁾			
Model	Icu	Ics	Voltage
TL250NJ	40 kA	–	250V DC

Cross reference table

	Section/page
Accessories	6 - 15, 6 - 16
Application data	13
Characteristics curves	7 - 10
Motor starting (Type 2)	13
Detailed dimensions - MCCB only	7 - 35

Product extensions

	Section/page
TemCurve	13 - 43
Residual current relays	11

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2 Australia

Approvals

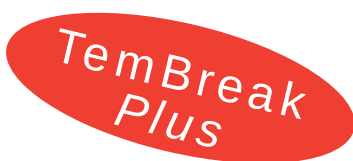
ASTA/UK, Aust. standards
Marine
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France

Notes: ¹⁾ Poles in series. Refer applications section 10.

Available on indent only.

TL400NE LimitorBreaker series electronic

- ❑ NEW series TL breaker.
- ❑ Two fast break contacts per pole.
- ❑ Powerful interrupting capacities.
- ❑ Provides limitation of system damage during a fault.
- ❑ Electronic trip unit with Long, Short & Instantaneous adjustments.
- ❑ Icu = Ics = 85kA at 415V.
- ❑ Adjustment range 50 – 100% of nominal current rating.
- ❑ True RMS monitoring.
- ❑ I²t ramp switch to assist in obtaining total selectivity.
- ❑ Can be used for selectivity applications.
- ❑ 3 or 4 pole types available.
- ❑ Standards IEC947-2/AS3947-2.



5

TL400NE (85 kA) 3 pole

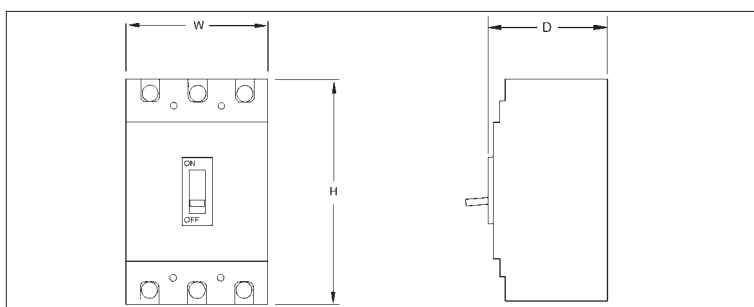
Ampere rating	Min	Max	Cat. No.
400	200	400	TL400NE 400 3

TL400NE (85 kA) 4 pole

400	200	400	 TL400NE 400 4
-----	-----	-----	---

Dimensions (mm)

Description		Height ¹⁾	Width	Depth	kg
TL400NE	3 pole	360	105	140	7.1
TL400NE	4 pole	360	185	103	9.1



Short circuit capacity

AC use			
Model	Icu	Ics	Voltage
TL400NE	100 kA	100 kA	400V AC
TL400NE	185 kA	85 kA	415V AC

OCR options (factory fitted)

Description	Code
Pre-trip alarm	LSIP
Fault indicators ²⁾	FI
Special LTD curves	-

Cross reference table

	Section/page
Accessories	6 - 15, 6 - 16
Application data	13
Characteristics curves	7 - 12
Motor starting	13
Connection & mounting details	7 - 37, 8 - 31, 32, 33
Detailed dimensions - MCCB only	7 - 37

Product extensions

	Section/page
TemCurve	13 - 43
Residual current relays	11

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2 Australia

Approvals

ASTA/UK, Aust. standards
Marine
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France

Notes: ¹⁾ Height excludes attached busbar.

²⁾ Includes factory fitted OCR controller specify voltage 240V or 110V AC.

 Available on indent only.

TL630NE, TL800NE and TL1250NE LimiterBreaker series electronic

- ❑ NEW series TL breaker.
- ❑ Powerful interrupting capacities.
- ❑ Provides limitation of system damage during a fault.
- ❑ Electronic trip unit with Long, Short & Instantaneous adjustments.
- ❑ Ics = 65 to 70kA at 415V.
- ❑ Adjustment range 50 – 100% of nominal current rating.
- ❑ True RMS monitoring.
- ❑ I²t ramp switch to assist in obtaining total selectivity.
- ❑ Can be used for selectivity applications.
- ❑ 3 or 4 pole types available.
- ❑ Standards IEC947-2/AS3947-2.

TL630NE (125 kA) 3 pole

Ampere rating	Min	Max	Cat. No.
630	315	630	 TL630NE 630 3

TL800NE (125 kA) 3 pole

Ampere rating	Min	Max	Cat. No.
800	400	800	 TL800NE 800 3

TL1250NE (125 kA) 3 pole

Ampere rating	Min	Max	Cat. No.
1000	500	1000	 TL1250NE 1000 3FC
1250	625	1250	 TL1250NE 1250 3FC

TL630NE (125 kA) 4 pole

Ampere rating	Min	Max	Cat. No.
630	315	630	 TL630NE 630 4

TL800NE (125 kA) 4 pole

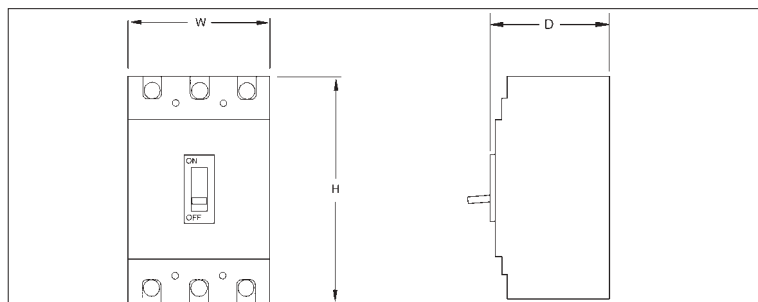
Ampere rating	Min	Max	Cat. No.
800	400	800	 TL800NE 800 4

TL1250NE (125 kA) 4 pole

Ampere rating	Min	Max	Cat. No.
1000	500	1000	 TL1250NE 1000 4FC
1250	625	1250	 TL1250NE 1250 4FC

Dimensions (mm)

Description	Height ¹⁾	Width	Depth	kg
TL630/800/1250NE 3 pole	370	210	191	26.0
TL630/800/1250NE 4 pole	370	280	191	33.7



Notes: ¹⁾ Height excludes attached busbar.

²⁾ Includes factory fitted OCR controller specify voltage 240V or 110V AC.

 Available on indent only.



TemBreak
Plus

Short circuit capacity

AC use

Model	Icu	Ics	Voltage
TL630NE	125 kA	70 kA	400V AC
TL630NE	125 kA	70 kA	415V AC
TL800NE	125 kA	70 kA	400V AC
TL800NE	125 kA	70 kA	415V AC
TL1250NE	125 kA	65 kA	400V AC
TL1250NE	125 kA	65 kA	415V AC

OCR options (factory fitted)

Description	Code
Ground fault trip	LSIG
Pre-trip alarm ²⁾	LSIP
Fault indicators	FIP
Special LTD curves	-

Cross reference table

	Section/page
Accessories	6 - 19, 6 - 20
Application data	13
Characteristics curves	7 - 12
Connection & mounting details	7 - 44, 8 - 31, 32, 33
Detailed dimensions	
- MCCB only	7 - 44
- motor operators	7 - 45
OCR setting details	7 - 11 to 7 - 23

Product extensions

	Section/page
TemCurve	13 - 43
Residual current relays	11

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2 Australia

Approvals

ASTA/UK, Aust. standards
Marine
Lloyds R/UK
ABS/USA
GL/GERMANY
BV/France

DC thermal magnetic types 630 A – 2500 A

- ❑ Magnetic trip units for DC applications ⁷⁾.
- ❑ 5 ratings to 2500 A.
- ❑ Size range 630 - 2500 A.
- ❑ Adjustable magnetic trips.

Ampere rating (A)

	Cat. No. ²⁾ ³⁾
1000	 XS1000ND ¹⁾
1250	XS1250ND ¹⁾
1600	XS1600ND
2000	 XS2000ND
2500	 XS2500ND



5

Note:
All TemBreak thermal magnetic MCCBs can be used for DC applications

UVTs available

Ampere frame	1000	1250	1600	2000	2500
Type	XS1000ND	XS1250ND	XS1600ND	XS2000ND	XS2500ND
Number of poles	2 3	2 3	2 3	2 3	2 3
Rated current (A) In					
Calibrated at 45°C					
DC RATED OPERATIONAL VOLTAGE (Ue) (V DC)	1000 600	1250 600	1600 600	2000 600	2500 600
DC RATED INSULATION VOLTAGE (Ui) (V DC)	600	600	600	600	600
DC RATED BREAKING CAPACITY [kA]					
IEC 947-2 [Icu]	⁴⁾ 600 V	- 20/10	- 20/15	- 20/15	- 20/15
BS EN 60947-2 [Icu]	⁴⁾ 500 V	- 20/10	- 20/15	- 20/15	- 20/15
CEI EN 60947-2	⁴⁾ 350 V	- 30/15	- 30/23	- 30/23	- 30/23
250 V	40/12 -	40/30 -	40/30 -	40/30 -	40/30 -
OUTLINE DIMENSIONS (mm)					
a	210	210	210	320	320
b	273	370	370	450	450
c	103	140	140	185	185
d	145	191	191	245	245
Weight (kg) ♦ marked standard type	9.2 10.3	23.8 26.0	24.0 27.0	50.0 54.0	55.7 62.5
CONNECTION AND MOUNTINGS					
Front connect (FC)	Terminal screw (FCS)	-	-	-	-
	Attached flat bar (BAR)	♦	♦	○	-
	Solderless terminal (PWC)	-	-	-	-
Rear connect (RC)	Bolt stud (REB)	-	-	-	-
	Flat bar stud (REF)	○	○	♦	♦
plug-in (PM)	For switchboard (PCR/PMB)	-	-	-	-
	For distribution board	-	-	-	-
Draw-out (DO)	-	-	○	○	-
STANDARD FEATURES					
ON/OFF colour indication	●	●	●	●	●
Trip button	●	●	●	●	●
PROTECTIVE FUNCTIONS					
Thermal and adjustable magnetic trips	●	-	-	-	-
Adjustable magnetic trips only	-	●	●	●	●
ACCESSORIES (option)					
Internally mounted	Auxiliary switch AX, AXE	● (AX)	● (AX)	● (AX)	● (AX)
	Alarm switch AL, ALE	● (AL)	● (AL)	● (AL)	● (AL)
	Shunt trip SHT	●	●	●	●
	Undervoltage trip UVT	-	-	-	-
Externally mounted	Motor operator MOT	●	●	●	●
	Handle Panel mounted type OHE	●	●	●	●
	operating Breaker mounted type OHJ	●	●	-	-
	mechanism Variable depth type OHH	●	●	-	-
	Handle extension EHA	●	●	♦	♦
	Mechanical interlock front type MIF	●	●	●	●
	Mechanical interlock rear type MIB	●	●	●	●
	Handle holder HH	●	●	●	●
	Handle lock HL	●	●	●	●
	Terminal cover front connect type TCF	●	-	-	-
	Terminal cover rear/plug-in type TCR	●	-	-	-
	Interpole barriers TBA	●	●	-	-
	Accessories lead terminal ⁵⁾ LTF	●	●	●	●
	⁶⁾ LTS	-	-	-	-
	Door flange D.F	●	●	●	●
	IP 20 protection (Draw out type) IP 20	-	-	●	-

Notes: ¹⁾ 3 pole sizes stocked

²⁾ Mounting details for DC Application series are identical to those for the same frame size Standard series (i.e. for XS1000ND refer to XS800NJ, XS1250ND and XS1600ND refer to XS 1600NE, XS2000ND and XS2500ND refer to XS2500NE)

³⁾ Many accessories are common with AC types though please refer to NHP for correct Cat. No.s

⁴⁾ The time constant (L/R) of the circuit should be less than

2.0 ms at or below rated current, less than 7 ms for short circuit equal and below 10 kA, less than 15 ms for short circuit over 10 kA and the connection should be three poles in series.

⁵⁾ Draw-out leads, horizontally.

⁶⁾ Draw-out leads, vertically.

⁷⁾ XS1000ND is a thermal magnetic type.

♦ Supplied as standard. ○ Optional specify when ordering.

● Yes or available. - Not available

MCCB isolating switches (non-auto MCCBs)

- ❑ Accepts MCCB accessories.
- ❑ Suitable for panelboards.
- ❑ Standards IEC 947-2/AS3947-2.
- ❑ Motor or motorised circuit isolation - no overcurrent protection.



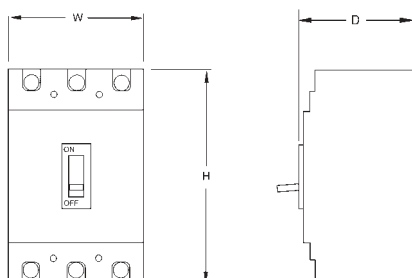
Ordering details

Ampere rating	Short time rating (kA)	Catalogue number ¹⁾	
		3 pole	4 pole
125	1.8 kA for 1 sec	XS125NN3	XS125NN4
250	3 kA for 1 sec	XE225NNC3	XE225NNC4
250	4 kA for 1 sec	XS250NN3	XS250NN4
400	5 kA for 0.3 sec	XS400NN3	XS400NN4
630	9.6 kA for 0.3 sec	XS630NN3	XS630NN4
800	9.6 kA for 0.3 sec	XS800NN3	XS800NN4
1250	15 kA for 0.3 sec	XS1250NN3FC	XS1250NN4FC
1600	20 kA for 0.3 sec	XS1600NN3FC	XS1600NN4FC
2000	35 kA for 0.3 sec	XS2000NN3RC	XS2000NN4RC
2500	35 kA for 0.3 sec	XS2500NN3RC	XS2500NN4RC

Note: ¹⁾ Refer pages 5 - 6 to 5 - 7 for additional technical details.

Dimensions (mm)

Description Amp rating	Height	Width		Depth	kg	
	²⁾	3P	4P		3P	4P
125	155	90	120	86	1.3	1.58
225	160	105	—	67	1.85	—
250	165	105	140	86	1.85	2.4
400	260	140	185	103	5	6.2
630	273	210	280	103	9	12.2
800	273	210	280	103	9	12.2
1250	370	210	280	120	22	28
1600	370	210	280	140	27	35
2000	450	320	429	185	54	62.5
2500	450	320	429	185	67	78.2



Note: ²⁾ Height excludes attached busbar.

Cross reference table

Accessories	- refer MCCB 6
Connection and mounting	- refer MCCB 7 and 8
Detailed dimensions	- refer MCCB 7

Base standards

IEC 947-2
BS EN 60947 Part 2
VDE 0660 Part 1
AS 3947-2 Australia

Section

Approvals

ASTA/UK, Aust. standards
Marine
Lloyds R/UK
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GL/GERMANY
BV/France

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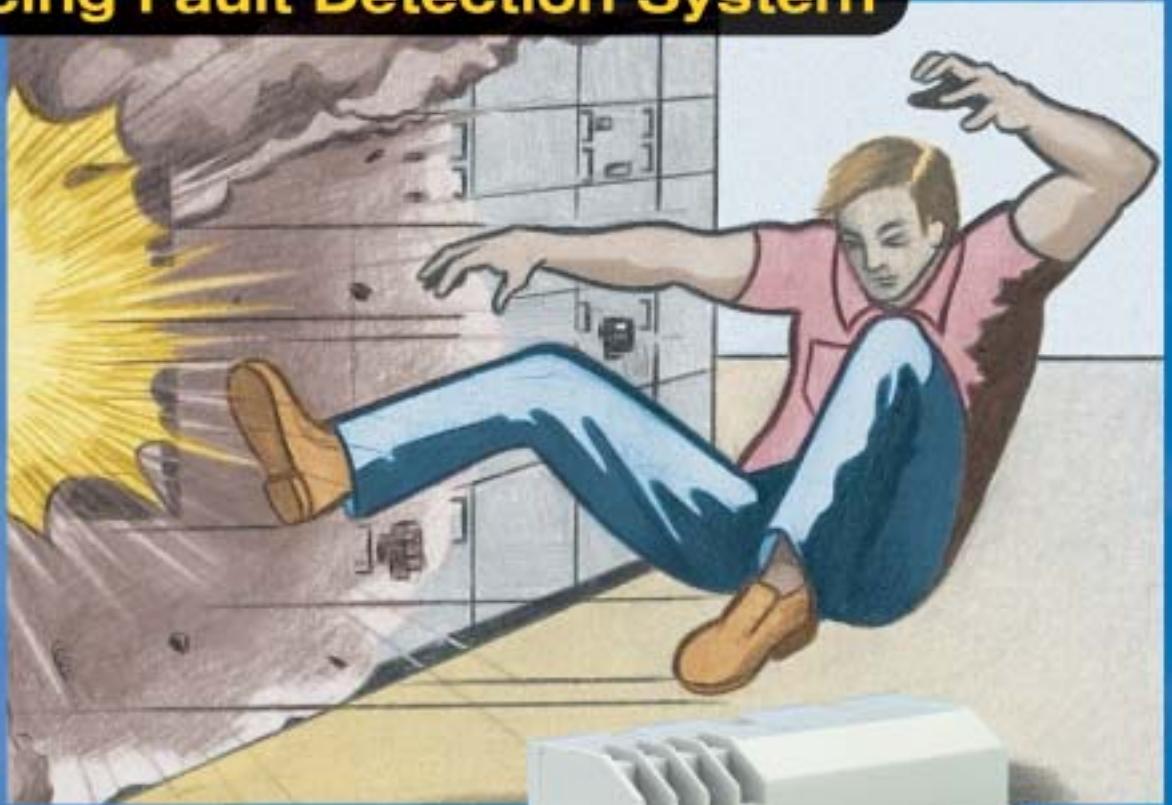
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Arcing Fault Detection System



DETECTS:

DANGEROUS ARCING FAULTS

LIMITS:

COSTLY DOWNTIME AND REPAIRS

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CEP 7-C "Networkable" Motor Protection Relay

Complete protection,
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**Superior motor protection in a
cost effective package**

- Adjustable overload trip class
- Asymmetry
- Overtemperature (PCT)
- Mechanical jam/stalling
- Earth fault
- Underload

**Warning functions to minimise
down time**

- Thermal overload
- Asymmetry/phase loss
- Underload
- Mechanical jam/stalling

**Motor current monitoring &
diagnostics for rapid fault detection**

- Phase current
- Thermal capacity
- Device status
- Trip status
- Average current
- Earth fault
- Warning status
- Trip history

**Standard
CA 7
contactor**

**I/O
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 - ▶ Panelboards
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 - ▶ Auxiliary contacts
 - ▶ Electronic and thermal protection relays
 - ▶ Strömberg
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 - ▶ Fuse switch cassette system

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