TemBreak *Plus* Ratings Chart

PowerBreaker Series Ics = 50kA

Selectivity Series SE

TERASAKI

Number of poles
Outside view
Notes:
[1]) Adjustable ground fault available on indent, fitted externally.
[2]) LED indicators only or LED contacts, please specify.
◆ Supplied as standard. ○ Optional standard.
● Yes or available. – Not available
[i] Available on indent only

Type	XH125PJ	XH160PJ	XH250PJ	XH400PJ	XH630PJ	XH800PJ	XH400PE	XH630PE	XH800PE	XS400SE	XH400SE	XS630SE	XH630SE
Ampere frame	125A	160A	250A	400A	630A [i]	800A	400A [i]	630A [i]	800A	400A	400A [i]	600A	630A [i]
Number of poles	3P 4P	3P	3P	3P 4P	3P 4P	4P	3P 4P	3P 4P	3P 4P	3P 4P	3P 4P	3P 4P	3P 4P
Rated current (A).In NRC – Nominal rated current	NRC ASR	NRC ASR	NRC ASR	NRC ASR	NRC ASR	NRC ASR	NRC ASR	NRC ASR	NRC ASR	NRC ASR	NRC ASR	NRC ASR	NRC ASR
ASR – Adjustable setting range	min max	min max	min max	min max	min max	min max	min max	min max	min max	min max	min max	min max	min max
Rated current at 40°C	20 12.5 20	160 100 160			400 250 400	800 500 800		630 315 630	800 400 800	160 80 160	160 80 160	630 315 630	630 315 630
	32 20 32		250 160 250	250 125 250	630 400 630		250 125 250			250 125 250	250 125 250		
	50 32 50			400 250 400			400 200 400			400 200 400	400 200 400		
	63 40 63												
	100 63 100												
	125 80 125												
AC RATED INSULATION VOLTAGE (Ui)	690	690	690	690	690	690	690	690	690	690	690	690	690
AC RATED BREAKING CAPACITY sym r.m.s. [kA]				ICU/ICS	ICU/ICS	ICU/ICS	ICU/ICS	ICU/ICS	ICU/ICS	ICU/ICS	ICU/ICS	ICU/ICS	ICU/ICS
1EC 947-2 [Icu] IEC 957-2[Ics] 1100V	–	–	–	–	–	–	–	–	–	–	–	–	–
AS 3947-2 [Icu] AS 3947-2[Ics] 1000V	–	–	–	–	–	–	–	–	–	–	–	–	–
Note: Rated Impulse withstand voltage 690V	8/4	15/7.5	18/9	18/9	45/23	45/23	20/10	20/10	20/10	18/9	20/10	20/10	20/10
Uimp (kV) is 8kV on all XS, XE and XH MCCBs 500V	25/13	23/13	30/15	30/15	65/33	65/33	42/21	42/21	42/21	30/15	42/21	35/18	42/21
440V	42/21	42/21	42/21	42/21	85/43	85/43	65/50	65/50	65/50	42/21	65/33	50/25	65/33
415V	50/50	50/50	65/50	65/50	85/50	85/50	65/50	65/50	65/50	50/25	65/33	50/25	65/33
400V	50/50	50/50	65/50	65/50	100/50	100/50	65/50	65/50	65/50	50/25	65/33	50/25	65/33
240V	85/50	85/50	85/50	85/50	125/163	125/63	100/50	100/50	100/50	85/43	100/50	85/43	100/50
without Inst. 240-690V	–	–	–	5	–	–	5	10	10	5	5	10	10
DC RATED BREAKING 250V	40	40	40	40	40	40	–	40	40	–	–	–	–
CAPACITY (kA) 125V	40	40	40	40	40	40	–	40	40	–	–	–	–
RATED SHORT TIME CURRENT r.m.s. [kA] [Icw]	–	–	–	5 (0.3 sec)	–	–	5 (0.3 sec)	10 (0.3 sec)	10 (0.3 sec)	5 (0.3 sec)	5 (0.3 sec)	10 (0.3 sec)	10 (0.3 sec)
DIMENSIONS (mm)													
a	90 120	105 140	140 185	140 185	210 280	210 280	140 185	210 280	210 280	140 185	140 185	210 280	210 280
b	155	165	260	260	273	273	260	273	273	260	260	273	273
c	86	103	103	103	103	103	103	103	103	103	103	103	103
d	104	124	145	145	145	145	14	145	145	131	131	145	145
Weight (kg) ◆ marked standard type	1.3 1.6	2.1 2.6	4.7 6.1	4.7 6.1	9 1.6	9 11.5	4.8 6.2	9.6 12	9.7 12.2	4.8 6.2	4.8 6.2	9.6 12	9.6 12
CONNECTION AND MOUNTINGS													
front connect (FC) terminal screw	◆	◆	◆	◆	–	–	◆	–	–	◆	◆	–	–
attached flat bar	○	○ (Bar)	○ (Bar)	○ (Bar)	◆	◆	○ (Bar)	◆	◆	○ (Bar)	○ (Bar)	◆	◆
solderless terminal (PWC)	○	○	○	○	○	○	○	○	○	○	○	○	○
rear connect (RC) bolt stud	○	○	○	–	–	–	–	–	–	–	–	–	–
flat bar stud	–	–	–	○	○	○	○	○	○	○	○	○	○
plug-in (PM) for switchboard	○	○	○	○	○	○	○	○	○	○	○	○	○
for distribution board	–	–	–	–	–	–	–	–	–	–	–	–	–
draw-out (DO)	–	–	–	○	○	○	○	○	○	○	○	○	○
STANDARD FEATURES													
contact indicator	●	●	●	●	●	●	●	● [1])	●	●	●	●	● [1])
trip button	●	●	●	●	●	●	●	●	●	●	●	●	●
PROTECTIVE FUNCTIONS													
Electronic type													
Adjustable LTD, STD & INST	–	–	–	–	–	–	●	●	●	●	●	●	●
Adjustable GFT or Adjustable PTA (option)	–	–	–	–	–	–	● [1])	●	●	● [1])	● [1])	●	●
Trip indicators (option) (contacts)	–	–	–	–	–	–	● [2])	● [1])	● [2])	● [2])	● [2])	● [2])	● [2])
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**	●	●	●	●	●	●	●	●	●	●	●	●	●
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**	●	●	●	●	●	●	●	●	●	●	●	●	●

TemBreak *Plus* Ratings Chart

Selectivity Series SE

LimitorBreaker Series Ics = 65 - 85kA

Mining Series TL/XV

TERASAKI

Type
Ampere frame
Number of poles
Outside view

Notes:
[1]) Adjustable ground fault available on indent, fitted externally.
[2]) LED indicators only or LED contacts, please specify.
◆ Supplied as standard. ○ Optional standard.
● Yes or available. – Not available
[1] Available on indent only

Type	XS800SE	XH800SE	XS1250SE	XS1600SE	TL100NJ	TL250NJ	TL400NE	TL630NE	TL800NE	TL1250NE	TL100EM	XV400NE	XV630/800PE	XV1250NE
Ampere frame	800A [1]	800A [1]	1250A	1600A	100A	250A	400A	630A	800A	1250A	100A	400A	630/800A	1250A
Number of poles	3P 4P	3P 4P	3P 4P	3P 4P	3P 4P	3P 4P	3P 4P	3P 4P	3P 4P	3P 4P	3P	3P	3P	3P
Outside view														
Rated current (A).In NRC – Nominal rated current	NRC ASR	NRC ASR	NRC ASR	NRC ASR	NRC ASR	NRC ASR	NRC ASR	NRC ASR	NRC ASR	NRC ASR	Non-Adjust	NRC ASR	NRC ASR	NRC ASR
ASR – Adjustable setting range	min max	min max	min max	min max	min max	min max	min max	min max	min max	min max		min max	min max	min max
Rated current at 40°C	800 400 800	800 400 800	1000 500 1000	1600 800 1600	20 12.5 20	160 100 160	400 200 400	630 315 630	800 400 800	1000 500 1000	15 50	160 80 160	630 315 630	400 200 400
			1250 630 1250		32 20 32	250 160 250				1250 630 1250	20 60	250 125 250	800 400 800	800 400 800
					50 32 50						30 75	400 200 400		1000 500 1000
					63 40 63						40 100			1250 630 1250
					100 63 100									
AC RATED INSULATION VOLTAGE (Ui)	690	690	690	690	690	690	690	690	690	690	1150	1150	1150	1150
AC RATED BREAKING CAPACITY sym r.m.s. [kA]	ICU/ICS	ICU/ICS	ICU/ICS	ICU/ICS			ICU/ICS	ICU/ICS	ICU/ICS	ICU/ICS				
1EC 947-2 [Icu] [1]) IEC 957-2[Ics] [1]) 1100V	–	–	–	–	–	–	–	–	–	–	6.5	12.5	12.5	20
AS 3947-2 [Icu] AS 3947-2[Ics] 1000V	–	–	–	–	–	–	–	–	–	–	10	12.5	18	20
Note: Rated Impulse withstand voltage 690V	20/10	20/10	25/19	45/34	–	25/25	25/25	45/34	45/34	45/34	–	–	–	–
Uimp (kV) is 8kV on all XS, XE and XH MCCBs 500V	35/18	42/21	45/34	65/49	–	70/70	70/70	75/57	75/57	75/57	–	–	–	–
440V	50/25	65/33	65/49	85/64	85/85	85/85	85/85	125/70	125/70	125/65	–	–	–	–
415V	50/25	65/33	65/49	85/64	85/85	85/85	85/85	125/70	125/70	125/65	–	–	–	–
400V	50/25	63/33	65/49	85/64	85/85	100/100	100/100	125/70	125/70	125/65	–	–	–	–
240V	85/43	100/50	100/75	125/94	100/100	130/130	130/130	150/113	150/113	150/113	–	12.5	18	12.5
without Inst. 240-690V	10	10	15	20	–	–	–	15	15	15	–	–	–	–
DC RATED BREAKING 250V	–	–	–	–	40	40	–	–	–	–	–	–	–	–
CAPACITY (kA) 125V	–	–	–	–	40	40	–	–	–	–	–	–	–	–
RATED SHORT TIME CURRENT r.m.s. [kA] [Icw]	10 (0.3 sec)	10 (0.3 sec)	15 (0.3 sec)	20 (0.3 sec)	–	–	–	15 (0.3 sec)	15 (0.3 sec)	15 (0.3 sec)				
DIMENSIONS (mm)														
a	210 280	210 280	210 280	210 280	90 120	105 185	140 185	210 280	210 280	210 280	105	140	210	210
b	273	273	370	370	235	360	360	370	370	370	165	260	273	370
c	103	103	120	120	86	103	103	140	140	140	125	103	103	120
d	145	145	171	191	104	145	145	191	191	191	143	131	145	171
Weight (kg) ◆ marked standard type	9.7 12.5	9.7 12.5	22 28	27 35	2.2 2.7	7.1 9.1	7.1 9.1	25.8 33.5	25.8 33.5	26 33.7	3.2	4.8	9.7	22
CONNECTION AND MOUNTINGS														
front terminal screw	–	–	–	–	◆	◆	◆	–	–	–	◆	◆	–	–
connect (FC) attached flat bar	◆	◆	◆	◆	○	○ (Bar)	○ (Bar)	◆	◆	◆	–	○ (Bar)	◆	◆
solderless terminal (PWC)	○	○	○	–	○	○	○	○	○	○	○	○	○ (630 only)	○
rear bolt stud	–	–	–	–	○	○	–	–	–	–	◆	–	–	–
connect (RC) flat bar stud	○	○	○	○	–	–	○	○	○	○	–	○	○	○
plug-in (PM) for switchboard	○	○	○	–	○	○	○	○	○	○	○	○	–	–
for distribution board	–	–	–	–	○	○	–	–	–	–	–	–	–	–
draw-out (DO)	○	○	○	○	–	–	○	○	○	○	–	–	–	–
STANDARD FEATURES														
contact indicator	●	●	●	●	●	●	●	● [1])	● [1])	● [1])	–	●	●	●
trip button	●	●	●	●	●	●	●	●	●	●	●	●	●	●
PROTECTIVE FUNCTIONS														
Electronic type														
Adjustable LTD, STD & INST	●	●	●	●	–	–	–	●	●	●	–	●	●	●
Adjustable GFT or Adjustable PTA (option)	●	●	●	●	–	–	–	●	●	●	–	● [1])	●	●
Trip indicators (option) (contacts)	● [2])	● [2])	● [2])	● [2])	–	–	–	● [2])	● [2])	● [2])	–	● [2])	● [2])	● [2])
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	●	●	●	●	●	●	●	●	●	●	●	●	●	●
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	●	●	●	●	●	●	●	●	●	●	–	●	●	●

Note: [1]) Mining MCCBs TL/XV are rated in kA at Cos ø = 0.3 and do not have Icu/Ics ratings.

Selectivity and cascading applications

A higher reliance on electrical supply and safety in commerce and industry has increased awareness of circuit breaker technology and applications. Additionally, while maximising system safety and reliability, efficient economy or overall costs is also of great importance. The combination of these factors has given rise to more precise methods of circuit breaker application.

Two common methods relating to general power back-up and system protection are: Selectivity (Discrimination) and Cascading (Back-up). In general terms, Selectivity is used to improve system reliability, and to ensure a continuous supply of power to as high a degree as possible. Cascading on the other hand is generally used where economics plays a significant part in system design.

Selectivity (Discrimination)

Previously known as “Discrimination”, the most basic form of Selectivity is where two circuit breakers are connected in series. A higher amperage breaker is installed upstream, and a lower amperage breaker downstream. Should an overload or short circuit occur downstream, the downstream breaker will trip, but the upstream breaker will not, hence continuing to feed parts of the system which are fault free. This is the concept of selectivity.

Selectivity is generally used for example, in critical applications feeding essential loads. It is important to ensure total installation power is not lost due to a small or minor fault in a sub part of the overall electrical system, for example in a local distribution board. Total power loss could affect vital systems such as in hospitals, or computer systems etc.

The principle of Selectivity (Discrimination) is based upon an analysis of several types of circuit breaker characteristics. These include tripping characteristics (time current curves), Peak Let Through Current (I peak) and Energy Let Through (I^2T).

Selectivity can be “enhanced” beyond the breaking capacity of the downstream device, provided it is backed up by an appropriately selected upstream device, which will not trip (unlatch) under stated conditions.

Cascading (Back-up)

Cascading is achieved by using an upstream device to assist (back-up) a downstream device in clearing a fault current which happens to be greater than the breaking capacity of the downstream device.

In Cascading applications, the upstream device may have to trip (unlatch) in order to give sufficient protection to the downstream device, thus interrupting supply of power to all devices downstream. Therefore, Cascading is generally used in applications involving the supply of non-essential loads, such as basic lighting. The main benefit of Cascading is that in certain circumstances circuit breakers with breaking capacities lower than the prospective fault level, and hence lower in cost, can be safely used downstream provided it is backed up by the recommended upstream breaker.

Cascade/Selectivity tables

Full Cascade and Selectivity tables are shown in the “applications” section, number 10 of this catalogue.

Selection of breakers used in the tables:

25 / 50

Selectivity **Cascade**

Selectivity: The Selectivity or Enhanced Selectivity limit of the two nominated devices in series. Up to this level of fault current the downstream device will trip (unlatch) before the upstream device. Above this level, the upstream as well as the downstream device may trip.

Cascade: The enhanced or maximum downstream fault current that can be safely interrupted when both breakers are installed in series.

The Selectivity & Cascade levels stated by NHP are fully compliant with the requirements of the applicable standards. Selection of breakers should be in accordance with the selection tables located in section 10.

The figures stated in NHP tables are for nominated Terasaki devices only, and should not be used as guidance for using alternative brands of circuit breakers

XM30PB motor protection series

- **Fast break mechanism.**
- **Push to trip button.**
- **Positive contact indication.**
- **Suitable for Type ‘2’ co-ordination.**
- **Tested in combination with Sprecher + Schuh contactors.**
- **Standards IEC 947-2/AS 3947-2.**
- **Interrupting capacity @ 415 V 85 kA.**
- **Fixed thermal and magnetic trip.**

XM30PB (85 kA) 3 pole motor protection circuit breakers [1] [2]

Ampere rating	AC 3 kW 240 VAC	AC 3 kW 415 VAC	Cat. No.
0.7	–	0.2	**XM30PB 0.7 3P**
1.4	0.2	0.5	**XM30PB 1.4 3P**
2.0	–	0.75	**XM30PB 2.0 3P**
2.6	0.4	1.1	**XM30PB 2.6 3P**
4	0.75	1.5	**XM30PB 4.0 3P**
5	–	2.2	**XM30PB 5.0 3P**
8	–	3.7	**XM30PB 8.0 3P**
10	2.2	4	**XM30PB 10 3P**
12	–	5.5	**XM30PB 12 3P**

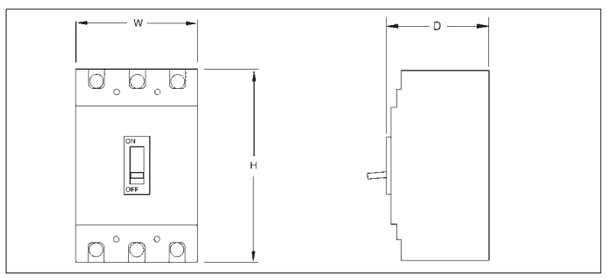
Short circuit capacity

Model	I/C	Voltage
XM30PB	85 kA	415/440 V 50 Hz

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

Dimensions (mm)

Description	Height	Width	Depth [2]	kg
XM30PB	148	78	102	1.3

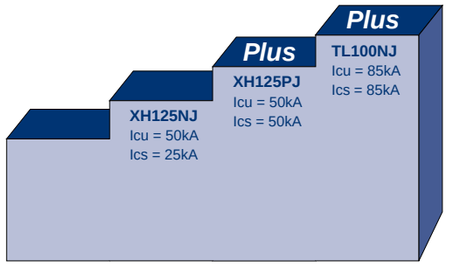


Cross reference table	Section
Accessories	6
Application data	13
Characteristics curves	7
Motor starting (Type 1 & 2)	13
Connection and mounting details	7, 8
Detailed dimensions	7

Base standards	Approvals
IEC 947-2	ASTA/UK, Aust. standards
BS EN 60947 Part 2	**Marine**
VDE 0660 Part 1	NK/JAPAN
AS 3947-2/Australia	Lloyds R/UK
JIS C 8372/JAPAN	ABS/USA
JEC 160/JAPAN	GL/GERMANY
	BV/FRANCE

Notes: [1]) Replaces XM30PS. Check dimensions for conversion purposes.
[2]) Add another 13 mm for the toggle length.

Powerful interrupting capacities



TL - PJ - PE series

The majority of distribution systems are designed to an ultimate short circuit rating (Icu). An Icu rated MCCB provides the optimum protection in terms of safe and economical selection.

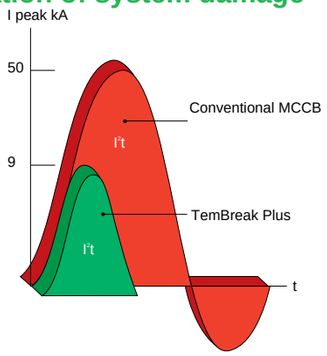
Certain applications may require protection which is designed to the more onerous service short circuit rating (Ics).

Terasaki's TemBreak *Plus* range can provide a wide choice of MCCBs with superior Ics ratings up to 85kA at 440V AC.

Icu = o-co 2 full short circuits (Icu)

Ics = o-co-co 3 full short circuits (Ics)

Limitation of system damage



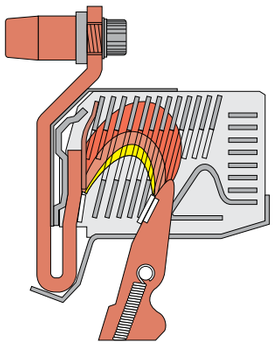
TL - PJ - PE series

Ics is often stated as a percentage of Icu (eg 50%) or as a kW rating (eg Icu/Ics = 50/50kA).

During a fault condition, a circuit breaker with excellent current limiting ability such as TemBreak *Plus*, can substantially reduce damage to the electrical system and thus minimise downtime.

This current limiting feature reduces the peak let through current (Ipeak) and energy let through (I^2t) during fault conditions.

Unique contact structure



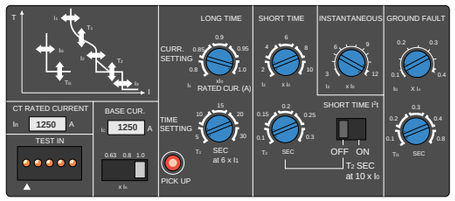
All TemBreak *Plus*

Terasaki's TemBreak *Plus* MCCBs achieve this exceptional current limiting performance by utilising a unique contact structure which we call the Fast Break Mechanism (FBM).

The U-Shaped contact of this mechanism assists in the electromagnetic repulsion of the contact tips for fast arc extinction.

The 50kA PowerBreaker Series uses one FBM per pole whilst the LimitorBreaker Series uses two FBM per pole to achieve its rating of 85kA.

Selectivity enhanced switchgear



SE series

The need for a continuous and reliable power supply places increased emphasis on selectivity requirements in today's electrical distribution system.

The Selectivity Series utilised microprocessor based protection, giving "enhanced" selectivity.

PowerBreaker Series Ics = 50kA - 85kA

Type		XH125PJ	XH160PJ	XH250PJ	XH400PJ	XH400PE	XH630PJ	XH630PE	XH800PJ	XH800PE
No. of poles		3,4	3,4	3,4	3,4	3,4	3,4	3,4	3,4	3,4
Ampere frame		125	160	250	400	400	630	630	800	800
Rated current in Amp		20,32,50,63 100,125	160	160,250	250,400	250,400	400,630	630	800	800
Rated AC breaking capacity	690V	8/4	15/7.5	18/9	18/9	20/10	45/23	20/10	45/23	20/10
IEC 60947-2	500V	25/13	25/13	42/21	42/21	42/21	65/33	42/21	65/33	42/21
Icu/Ics kA	440V	42/21	42/21	65/50	65/50	65/50	85/43	65/50	85/43	65/50
	415V	50/50	50/50	65/50	65/50	65/50	85/50	65/50	85/50	65/50
	400V	50/50	50/50	65/50	65/50	65/50	100/50	65/50	100/50	65/50
Thermal magnetic		Yes	Yes	Yes	Yes		Yes		Yes	
Microprocessor						Yes		Yes		Yes
Dimensions	4P	120x155x86	140x165x103	185x260x103	185x260x103	185x260x103	280x273x103	280x273x103	280x273x103	280x273x103
W-H-D mm	3P	90x155x86	105x165x103	140x260x103	140x260x103	140x260x103	210x273x103	210x273x103	210x273x103	210x273x103
Reference MCCB for accessories		XH125NJ	XH250NJ	XH400NJ	XS400NJ	XH400NE	XS630NJ	XH630NE	XS800NJ	XH800NE

LimitorBreaker Series Ics = 65 - 85kA

Type		TL-100NJ	TL-250NJ	TL-400NE	TL-630NE	TL-800NE	TL-1250NE
No. of poles		3,4	3,4	3,4	3,4	3,4	3,4
Ampere frame		100	250	400	630	800	1250
Rated current in Amp		20,32,50, 63, 100	160,250	400	630	800	1000 1250
Rated AC breaking capacity	690V	- -	25/25	25/25	45/34	45/34	45/34
IEC 60947-2	500V	- -	70/70	70/70	75/57	75/57	75/57
Icu/Ics kA	440V	85/85	85/85	85/85	125/70	125/70	125/65
	415V	85/85	85/85	85/85	125/70	125/70	125/65
	400V	85/85	100/100	100/100	125/70	125/70	125/65
Thermal magnetic		Yes	Yes				
Microprocessor				Yes	Yes	Yes	Yes
Dimensions	4P	120x235x86	185x360x103	185x360x103	280x370x140	280x370x140	280x370x140
W-H-D mm	3P	90x235x86	140x360x103	140x360x103	210x370x140	210x370x140	210x370x140
Reference MCCB for accessories		XH125NJ	XS400NJ	XH400NE	XS1600NE	XS1600NE	XS1600NE

TL100NJ

Selectivity Series SE

Type		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	450	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	690V	18/9	20/10	20/10	20/10	20/10	20/10	25/19	45/34
IEC 60947-2	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
Dimensions	4P	185x260x103	185x260x103	280x273x103	280x273x103	280x273x103	280x273x103	280x370x120	280x370x140
W-H-D mm	3P	140x260x103	140x260x103	210x273x103	210x273x103	210x273x103	210x273x103	210x370x120	210x370x140
Reference MCCB for accessories		XS400NE	XH400NE	XS630NE	XH630NE	XS800NE	XH800NE	XS1250NE	XS1600NE

Note: 1. All thermal magnetic MCCBs are adjustable from 63% - 100% of In.
2. All microprocessor MCCBs are adjustable from 50% - 100% of In.