

## ACCESSORIES

Accessories for TemBreak 2 MCCBs:

- are easy to install
- have simple operation
- are reliable

## REMOTE CONTROL AND INDICATION



## OPERATION



## CONNECTION AND MOUNTING



## INSULATION



## FULL RANGE OF BREAKERS

TemBreak 2 is a complete range of MCCBs and accessories. They can reliably protect circuits of up to 1600A from overload currents, short-circuit currents and earth-fault currents.

Tested by KEMA, approved by Marine Approval Societies worldwide, our quality is unsurpassed.



Switchboard  
builders



Energy suppliers

We have developed unique circuit breakers for your special application:

- \*1000V DC
- \*1100V AC
- \*Generator protection
- \*Residual current protection
- \*Emergency stop
- \*Motor protection



TERASAKI ELECTRIC (EUROPE) LTD.  
89 Boardmora Way, Clydebank Industrial Estate  
Clydebank, Glasgow, G81 4HT, Scotland (UK)  
Telephone: 44-141-941-1940  
Fax: 44-141-952-9246  
Email: marketing@terasaki.co.uk  
http://www.terasaki.com/



TERASAKI ELECTRIC (EUROPE) LTD.  
(FILIALE ITALIA)  
Via Ambrosoli, 4A-20090 Rodano, Milano, Italy  
Telephone: 39-02-92278300  
Fax: 39-02-92278320  
Email: info@terasaki.it  
http://www.terasaki.it/

TERASAKI ELECTRIC (EUROPE) LTD.  
(SUCURSAL EN ESPAÑA)  
C/Ros Des Ocells s.7, 08043 Granollers, (Barcelona) España  
Telephone: 34-93-879-60-50  
Fax: 34-93-870-39-05  
Email: terasaki@terasaki.es  
http://www.terasaki.es/

TERASAKI SKANDINAViska AB  
Box 2082, SE-1282 Skarpnack, Sweden  
Telephone: 46-8-556-282-30  
Fax: 46-8-556-282-39  
Email: info@terasaki.se  
http://www.terasaki.se

TERASAKI CIRCUIT BREAKERS (S) PTE. LTD.  
9 Toh Guan Road East 03-01 Alliance Building  
Singapore 608604  
Telephone: 65-6425-4915  
Fax: 65-6425-4351  
Email: tecs@pacific.net.sg

TERASAKI ELECTRIC (M) SDN. BHD.  
Lot 3, Jalan 16/13D, 40000 Shah Alam, Selangor Darul Ehsan, Malaysia  
Telephone: 60-3-5549-3820  
Fax: 60-3-5549-3980  
Email: terasaki@terasaki.com.my

TERASAKI DO BRASIL LTDA.  
Rus Cordovil, 259-Parada De Lucos, 21250-450  
Rio de Janeiro-RJ  
Telephone: 55-21-3301-8998  
Fax: 55-21-3301-8991  
Email: terasaki@terasaki.com.br  
http://www.terasaki.com.br

TERASAKI ELECTRIC (CHINA) LTD.  
72 Pacific Industrial Park, Xian Tang Zengcheng,  
Guangzhou 511340, China  
Telephone: 86-20-8270-8556  
Fax: 86-20-8270-8586  
Email: terasaki@public.guangzhou.gd.cn

TERASAKI ELECTRIC GROUP SHANGHAI  
REPRESENTATIVE OFFICE  
Room No. 1405-6, Tomson Commercial Building  
710 Dong Fang Road, Pudong, Shanghai, 200122, China  
Telephone: 86-21-58201611  
Fax: 86-21-58201621  
Email: terasaki@vip.163.com



**TemBreak**

Now from 20A to 1600A

## RATINGS AND SPECIFICATIONS

Model	THERMAL & MAGNETIC												ELECTRONIC																						
	L160-NJ			H250-NE			L125-NJ			H250-NJ			L250-NJ			H400-NE			L400-NE			H600-NE			L800-NE										
Parameter	Unit	125	160	200	250	125	160	200	250	125	160	200	250	125	160	200	250	125	160	200	250	125	160	200	250	125	160	200	250						
Isol. 400V AC	kA																																		
H160-NJ	125kA																																		
S125-GJ	65kA																																		
E160-BF	250A <sup>a</sup>																																		
E160-SF	250A <sup>a</sup>																																		
Nominal Current Ratings	In, 50°C (A)	125	160	200	250	125	250	200	250	125	160	200	250	125	250	200	250	125	160	200	250	125	160	200	250	125	160	200	250						
Maximum rating of frame	In, 50°C (A)	125	160	200	250	125	250	200	250	125	160	200	250	125	250	200	250	125	160	200	250	125	160	200	250	125	160	200	250						
Protection																																			
Available protection ratings	In, 50°C (A)	Thermal & magnetic	Thermal & magnetic	Thermal & magnetic	Thermal & magnetic	Thermal & magnetic	Thermal & magnetic	Thermal & magnetic	Thermal & magnetic	Thermal & magnetic	Thermal & magnetic	Thermal & magnetic	Thermal & magnetic	Thermal & magnetic	Thermal & magnetic	Thermal & magnetic	Thermal & magnetic																		
Overload Settings		Fixed	Fixed	Adjustable	Fixed	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable													
Short-Circuit Settings		Fixed	Fixed	Fixed	Fixed	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable													
Delayed Short-circuit protection		No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No																	
Short Time Withstand Current	low, 0.3s (kA)																																		
Utilisation Category	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	A	B	A	B	A	B	A	B	C	D							
Electrical Characteristics																																			
Rated Insulation Voltage	Ui (V)	690	690	690	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800						
Rated Withstand Voltage	Ui (kV)	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8					
Installation																																			
Poles		1	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4						
Front Connection	x	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o						
Extension Bar	x	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o						
Earth Bar	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o						
Rear Connection	x	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o						
Din Rail Mounting	x	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o						
Plug-in	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x						
Drawout	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x						
Dimensions:	Height (mm)	136	136	136	165	165	165	165	165	165	165	165	165	165	165	165	165	165	260	260	273	273	273	273	273	273	273	273	273	273					
	Width, 1P (mm)	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25				
	Width, 3P (mm)	75	105	90	105	105	105	105	105	105	105	105	105	105	105	105	105	105	140	140	140	140	140	140	140	140	140	140	140	140					
	Width, 4P (mm)	100	140	120	140	140	140	140	140	140	140	140	140	140	140	140	140	140	185	185	185	185	185	185	185	185	185	185	185	185					
	Depth (mm)	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	103	103	103	103	103	103	103	103	103	103	103	103					
	Weight, 3P (kg)	0.8	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.5	7.1	4.2	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0					
	Weight, 4P (kg)	1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.3	5.4	5.6	5.7	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5					
Operation																																			
Direct Opening Action		Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard															
Suitable for Emergency Stop		Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard															
Door-mounted handle	HS	x	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o					
Drawer-mounted handle	HB	x	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o					
Slide Interlock	MS	x	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o					
Link Interlock	ML	x	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o					
Wire Interlock	MV	x	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o					
Motor Operation	MC	x	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o					
Base Protection	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard																
Internal Accessories																																			
Auxiliary Switch	AX	x	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o					
Alarm Switch	AL	x	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o					
Shunt Trip	SH	x	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o					
Undervoltage Trip	UV	x	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o					
<b>COMMON INTERNAL ACCESSORIES</b>												<b>COMMON INTERNAL ACCESSORIES</b>												<b>COMMON UNDERVOLTAGE TRIP</b>											

**SAFETY LOCK FOR PLUG-IN VERSIONS**



The plug-in MCCB is locked to the base when the toggle is ON. It cannot be removed unless the toggle is OFF or TRIPPED. The safety lock prevents a trip occurring as the MCCB is being removed from the base.

Plug-in MCCB and base

Plug-in connection kit, including safety lock

**SUPERIOR TEMPERATURE PERFORMANCE**



All TemBreak 2 MCCBs are fully rated for use at 50°C. Overheating is the most common cause of failure in electrical switchgear. You can reduce the likelihood of overheating by using switchgear with superior temperature performance.

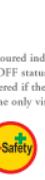


**DIRECT OPENING**



Under the heading "Measures to minimise the risk in the event of failure", IEC 6024-1 Safety of Machinery-Electrical Equipment of Machinery includes the following recommendation:  
"the use of switching devices having positive (or direct) opening operation."

**VISUAL SAFETY**



Coloured indicators display the ON or OFF status. The indicators are fully covered if the breaker trips, and black is the only visible colour.