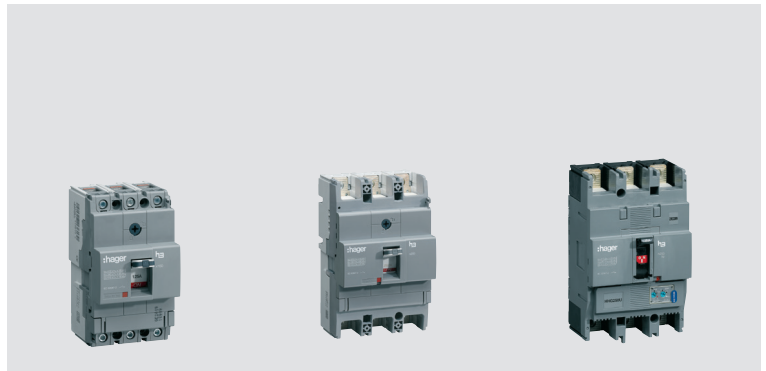


H3 circuit breakers conform to IEC/EN 60947-2 standards and to all major international standards and performance categories.

- Suitable for co-ordinated installations in all applications
- Thermal magnetic and electronic release
- Calibrated at 50°C

Cascading with MCBs (see cascading chart **Annex-10**)



			x160			x250			h250 TM		
Product			Switch	MCCB		Switch	MCCB		MCCB		
Reference			HCA	HHA	HNA	HCB	HHB	HNB	HEG		
Number of poles			[No.]	3-4	3-4	3-4	3-4		3-4		
<b>Electrical characteristics</b>											
Rated current	In	[A]	160			250			250		
Current rated range		[A]	125-160	16-160 (3,4P)		250	100-250		12.5-250		
Rated service voltage, (AC)	Ue	[V]	220-690			220-690			220-690		
Frequency	f	[Hz]	50/60			50/60			50/60		
Rated insulation voltage	Ui	[V]	690			800			800		
Rated impulse withstand voltage	Uimp	[kV]	8			8			8		
Rated ultimate short-circuit breaking capacity	(Icu)										
(AC) 50-60 Hz 220/230 V	Icu	[kA]	–	35	85	–	35	85	35	85	85
<b>(AC) 50-60 Hz 380/415 V</b>	Icu	[kA]	–	<b>25</b>	<b>40</b>	–	<b>25</b>	<b>40</b>	<b>25</b>	<b>50</b>	<b>65</b>
(AC) 50-60 Hz 480/500/525 V	Icu	[kA]	–	7.5	12.5	–	–	10	10	25	25
(AC) 50-60 Hz 660/690 V	Icu	[kA]	–	–	–	–	–	4	–	7.5	7.5
(DC) 250 V - 2 poles in series	Icu	[kA]	–	20	25	–	25	25	25	40	40
Rated service short-circuit breaking capacity,	(Ics)										
(AC) 50-60 Hz 220/230 V	Ics	[kA]	–	25	40	–	25	40	27	65	85
<b>(AC) 50-60 Hz 380/415 V</b>	Ics	[kA]	–	<b>20</b>	<b>20</b>	–	<b>20</b>	<b>20</b>	<b>19</b>	<b>25</b>	<b>36</b>
(AC) 50-60 Hz 480/500/525 V	Ics	[kA]	–	4	7.5	–	–	7.5	7.5	25	25
(AC) 50-60 Hz 660/690 V	Ics	[kA]	–	–	3	–	–	2	–	7.5	7.5
(DC) 250 V - 2 poles in series	Ics	[kA]	–	10	13	–	13	13	19	40	40
Rated short-circuit making capacity	Icm	[kA]	2.8	–	–	6	–	–	–	–	–
Rated short-time withstand current for 1s	Icw	[kA]	2	–	–	3	–	–	–	–	–
Category of use (EN 60947-2)			–	A		–	A		A		
Calibration temperature			–	50°C		–	50°C		50°C		
Derating											
	40°C		–	100%		–	100%		100%		
	50°C		–	100%		–	100%		100%		
	55°C		–	95%		–	94%		94%		
	60°C		–	93%		–	91%		91%		
	65°C		–	90%		–	88%		88%		
Suitability for insulation				ok			ok		ok		
Electric endurance in number of cycles				10000			10000		10000		
Mechanical endurance in number of operations				20000			20000		30000		
Operating temperature				-25 to +70°C			-25 to +70°C		-25 to +70°C		
Storage temperature				-35 to +70°C			-35 to +70°C		-35 to +70°C		
Power loss (at In for 3P)		[W]		39			60		65		
Reference standard			IEC 60947-3	IEC 60947-2		IEC 60947-3	IEC 60947-2		IEC 60947-2		
Releases: switch			ok	–		ok	–		–		
Releases: TM (thermomagnetic)			–	ok		–	ok		ok		
T fixed, M fixed			–	ok		–	ok		–		
T adjustable, M fixed			–	ok		–	–		–		
T adjustable, M adjustable			–	–		–	ok		ok		
Thermal adjustment value			–	0.63 to 1 x In		–	0.63 to 1 x In		0.63 to 1 x In		
Magnetic adjustment value			–	–		–	6-8-10-13 x In (200A) 5-7-9-11 In (250A)		6-8-10-13 x In		
Releases: LSI (electronic)			–	–		–	–		–		
Long delay			–	–		–	–		–		
Short delay			–	–		–	–		–		
Time delay			–	–		–	–		–		
<b>Connection</b>											
Standard terminal type				cage			lugs		lugs		
Maximum terminal capacity				95 mm <sup>2</sup>			185 mm <sup>2</sup> (cage)		120 mm <sup>2</sup> (cage)		
Terminal width		mm		–			25		25		
Terminal shields				ok			ok		ok		
Cage terminal				integrated			ok		ok		
Extended connections				ok			ok		ok		
Rear connections				no			ok		ok		
<b>Dimensions</b>											
Height		mm		130			165		165		
Width											
	1P	mm	–	25		–	–		–		
	2P	mm	–	50		–	–		–		
	3P	mm	–	75		–	105		105		
	4P	mm	–	100		–	140		140		
Depth		mm		68			68		68		
Weight											
	1P	kg	–	0.29		–	–		–		
	2P	kg	–	0.48		–	–		–		
	3P	kg	–	0.715		–	1.3		1.5		
	4P	kg	–	0.95		–	1.6		1.9		