

Emax air circuit-breakers. The evolution continues.

Preliminary - 1SDC200006B0201



ABB



New Emax.
The evolution continues.

Emax



The new Emax air circuit-breakers are the result of the constant commitment of ABB SACE to look for new solutions along with the expertise in design they have developed over the years. This evolution has been taking place since 1942. The new Emax series is an incredibly innovative high quality circuit breaker range, designed to satisfy all application requirements. The range has completely re-engineered releases fitted with latest generation electronics, improved performances within the same dimensions and new applications to fulfil the latest market needs. The new electronics open up a window on a world of extraordinary solutions, with connectivity options never seen before in the market. Discover the great advantages of ABB SACE's new Emax.



New Emax.
Lively performances.

EMAX



Continuing the tradition of ABB SACE, the new Emax range offers performances at the top of their category. The Emax series offers you a great advantage: with the increased performances, you can now utilise the smaller circuit-breaker frames, obtaining considerable savings both in economic terms and in physical space within the switchboard.

Emax E1 now offers current ratings up to 1600A, whilst Emax E3 is enhanced by version V with top of the range performances.

Always aware of the rapid changes in the market, ABB SACE has made some specific versions to cover new applications and to simplify retrofitting operations.





Now there is remote control

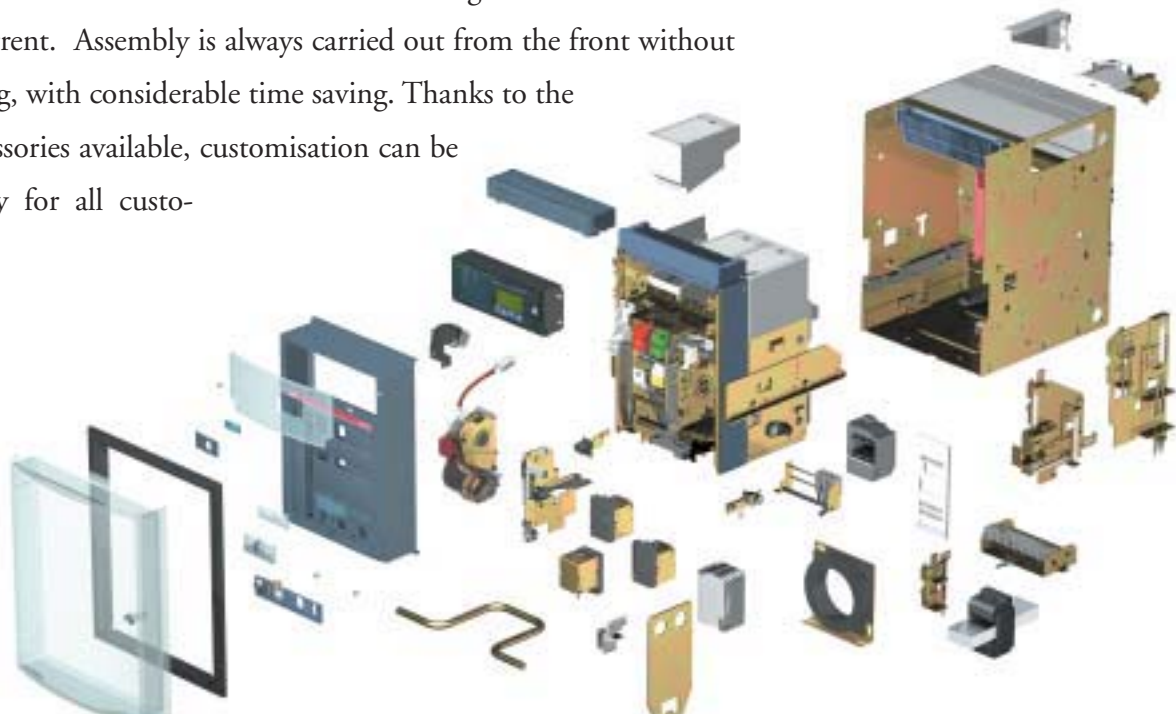
You can gain great benefits from the high level of connectivity possibilities: the new Emax can be connected to handheld and laptop computers utilising Bluetooth technology. The freedom of working with the latest technology offers many useful options: remote programming, supervision and maintenance information gathering can be carried out thanks to a new remote control supervision display. By means of new communication and configuration units, transmitting information to the outside world becomes child's play. It is even possible to control and monitor devices outside the circuit-breaker with the new external input/output modules.

Extremely simple installation

Installation of the Emax air circuit-breaker is simple thanks to the reduced number of fixing points positioned on the base of the unit. The availability of a wide range of terminals and conversion kits means wall-mounted or rear-accessed switchgear can be built with ease.

Standardised accessories over the whole range

Simplicity, convenience, safety and speed - these are the advantages of the accessory systems designed for the new Emax. The same accessories cover the entire range and can be used both with direct and alternating current. Assembly is always carried out from the front without the need for cabling, with considerable time saving. Thanks to the wide range of accessories available, customisation can be achieved effectively for all customer requirements.



The size advantage increases.



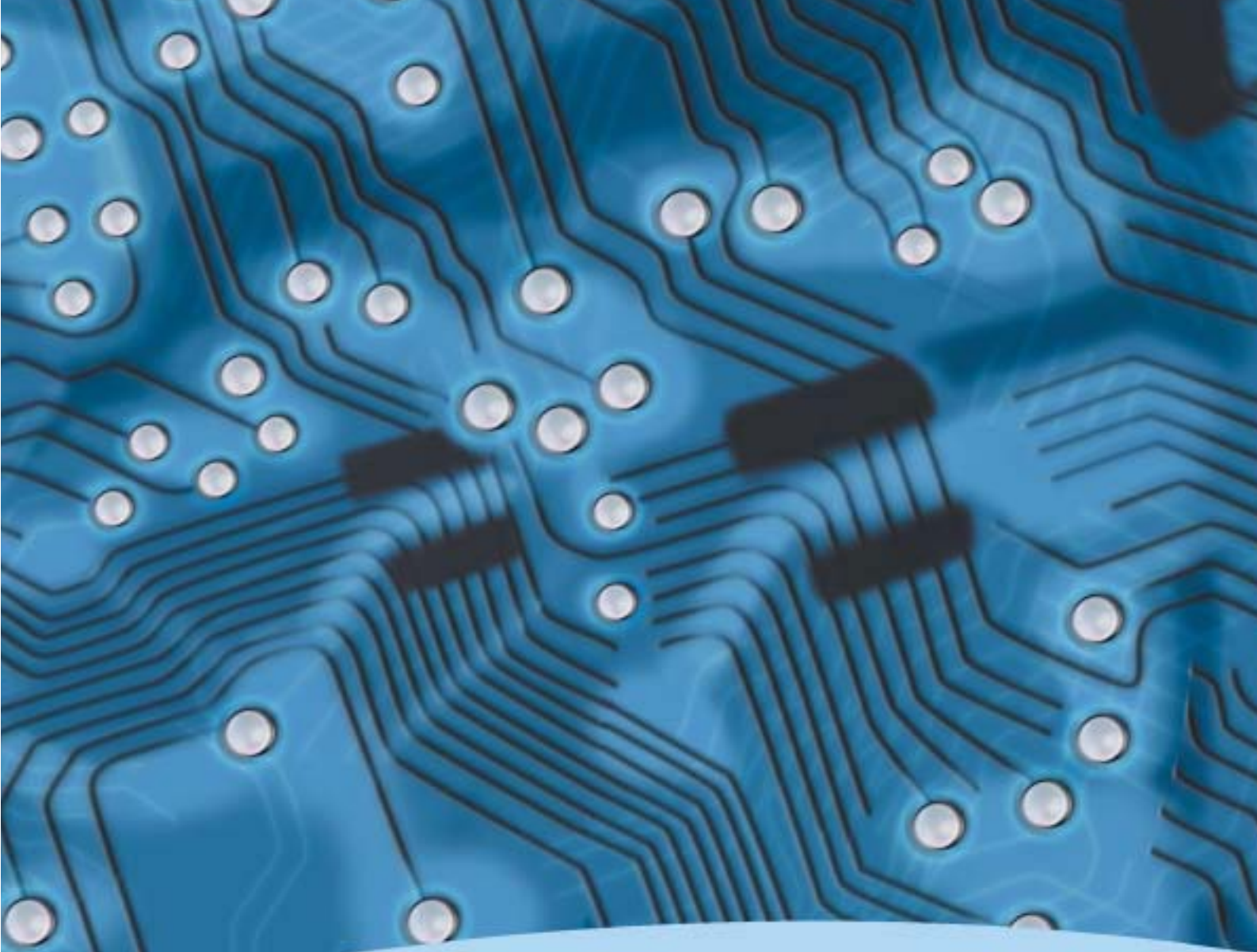


HD11567-90



New Emax.
Brilliant intelligence.

Emax



The new Emax range shines like a light from within: the new generation of protection releases is fitted with the latest advances in electronics, offering individual bespoke solutions for control and protection. The new releases, which are amazingly versatile and simple to use, offer important innovations, like the brand-new, intuitive operator interface allowing complete control of the system with just a few simple keystrokes.

Unique to the market, the PR123 release is fitted with directional protection, double protection against earth fault (G protection) and residual current protection. Discover just how intelligent the new Emax are.





Modularity

The latest generation electronics from ABB SACE have made it possible to design the new, revolutionary PR121, PR122 and PR123 protection releases. The re-engineered hardware architecture allows flexible and precise configuration. It is no longer necessary to completely replace the release with the new Emax - simply add the module which satisfies your requirements: a great advantage, both in terms of flexibility and customisation. The new Emax always offers you the most suitable solution for your installation requirement, even the most complicated ones.



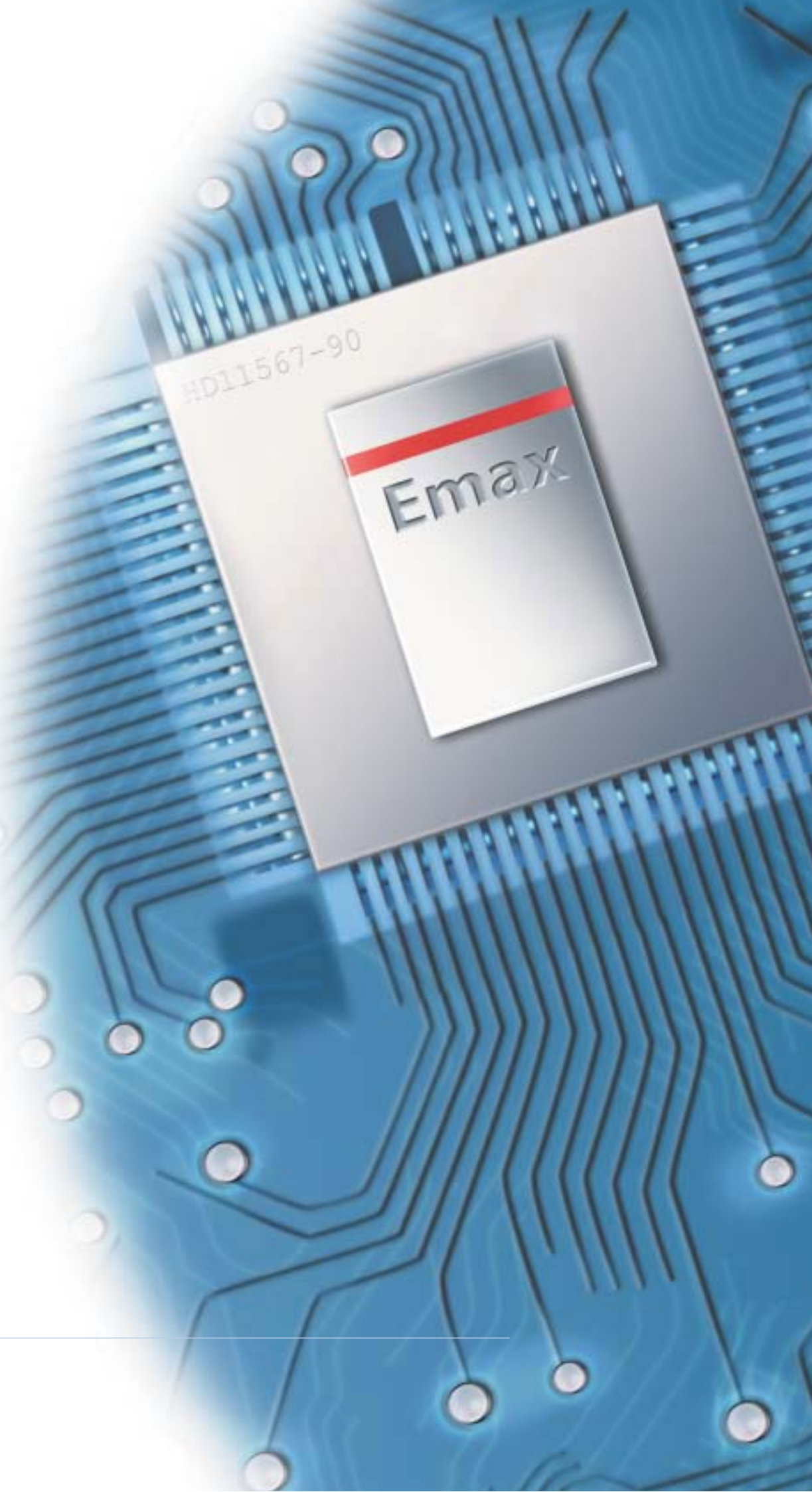
Faults: no problem

Indication of the cause of faults is now available on all the release versions. Furthermore, the exclusive data logger function automatically stores the evolution of the last fault and the information about the last twenty faults, helping you to analyse the cause of supply system interruptions. The new releases have many types of protection and alarms available, according to the version and configuration selected; features include maximum and minimum frequency, residual current protection and control of energy flow. It is no longer even necessary to use a different current sensor for each current rating. The new Emax offer you a world of extra solutions which are, at the same time, simple to use.

The new PR122 release can now be personalized, thanks to the communication, remote signalling, protection and advanced measurements modules at any time. In addition to these characteristics, the PR123 release makes all the system measurements, from current flow to the analysis of the harmonic content, available on board of the ACB, with high precision and clarity which makes the traditional external dedicated instruments unnecessary. Moreover, and unique to the market, it offers double protection against short time-delay short-circuit (protection "S"), for more efficient discrimination with moulded-case circuit-breakers on the supply side.



Always at your command
with an intuitive interface.





New Emax.

Ensured reliability.

EMAX

Reliability and safety have been two of the key factors in the success story of Emax and are a characteristic of the new series, too. Careful selection of materials, meticulous assembly and a rigorous testing stage make the new Emax an extremely reliable and sturdy product, able to withstand high dynamic and thermal stresses for longer than any other circuit-breaker in its category. With the new Emax, you are safe and the installation is safe. Furthermore, ABB SACE puts a highly specialised and rapid customer assistance service at your disposal. The new Emax gives you that comfortable feeling of safety which only a reliable product can do.



Certifications

ABB SACE circuit-breakers have always been appreciated worldwide for their reliability and versatility. These qualities are consistently recognised by countless international certifications. The new Emax air circuit-breakers and their accessories are in accordance with the international IEC 60947-2, EN 60947 (harmonised in 28 countries by CENELEC), CEI EN 60947 and IEC 61000 Standards and conform to the following European directives:

- “Low Voltage Directives” (LVD) no. 73/23/CEE (and subsequent variants)
- “Electromagnetic Compatibility Directive” (EMC) no. 89/336/CEE

The series conforms to the regulations for on-board installations and have been approved by the following Shipping Registers:

- RINA (Italian Shipping Register)
- Det Norske Veritas
- Bureau Veritas
- Germanischer Lloyd
- Lloyd’s Register of Shipping
- Polskj Rejester Statkow
- ABS (American Bureau of Shipping)
- RMRS (Russian Maritime Register of Shipping)
- NK (Nippon Kaiji Kyokai)



The Emax series also has a range complying with the ANSI C37.13, C37.16, C37.17 and C37.50 Standards and is certified according to the strict American UL 1066 Standard. It is certified by the Russian certification body GOST (Russia Certificate of Conformity) and has obtained the China CCC (China Compulsory Certification) certificate. Certification of conformity with the product Standards is carried out in accordance with the European EN 45011 Standard by the Italian certification body ACAE (Association for Certification of Electrical Apparatus), recognised by the European organisation LOVAG (Low Voltage Agreement Group). ABB SACE’s Quality System conforms to the international ISO 9001 Standard (model for quality assurance in design, development, manufacturing, installation and assistance), to the equivalent European EN ISO 9001 Standard and to the UNI EN ISO 9001 Italian transposition. The external certifying Body is RINA-QUACER. ABB SACE obtained its first certification with three-year validity in 1990 and has now reached its fourth certification. The manufacturing facility in Frosinone has also obtained ISO 14001 environmental certification.



You are safe

and the installation is safe.





ISDC200059F0001



ISDC200059F0001



ISDC200059F0001

E3					E4			E6	
N	S	H	V	L	S	H	V	H	V
2500	1000	800	800	2000	4000	3200	3200	4000	3200
3200	1250	1000	1250	2500		4000	4000	5000	4000
	1600	1250	1600					6300	5000
	2000	1600	2000						6300
	2500	2000	2500						
	3200	2500	3200						
	3200								
100	100	100	100	100	50	50	50	50	50
65	75	100	130	130	75	100	150	100	150
65	75	100	130	110	75	100	150	100	150
65	75	100	100	85	75	100	130	100	130
65	75	100	100	85	75	85 ⁽²⁾	100	100	100
65	75	85	100	130	75	100	150	100	125
65	75	85	100	110	75	100	150	100	125
65	75	85	85	65	75	100	130	100	100
65	75	85	85	65	75	85	100	100	100
65	75	75	85	15	75	100	100	100	100
65	65	65	65	-	75	75	75	85	85
143	165	220	286	286	165	220	330	220	330
143	165	220	286	242	165	220	330	220	330
143	165	187	220	187	165	220	286	220	286
143	165	187	220	187	165	187	220	220	220
B	B	B	B	A	B	B	B	B	B
■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■
80	80	80	80	80	80	80	80	80	80
70	70	70	70	70	70	70	70	70	70
30	30	30	30	12	30	30	30	30	30
	404/530				566/656			782/908	
	432/558				594/684			810/936	
66/80	66/80	66/80	66/80	72/83	97/117 97/117 97/117			140/160	140/160
104/125	104/125	104/125	104/125	110/127	147/190 147/190 147/190			210/260	210/260

E3 N-S-H-V						E3 L		E4 S-H-V		E6 H-V			
800	1000-1250	1600	2000	2500	3200	2000	2500	3200	4000	3200	4000	5000	6300
20	20	20	20	20	20	15	15	15	15	12	12	12	12
60	60	60	60	60	60	60	60	60	60	60	60	60	60
12	12	10	9	8	6	2	1.8	7	5	5	4	3	2
12	12	10	9	7	5	1.5	1.3	7	4	5	4	2	1.5
20	20	20	20	20	20	20	20	10	10	10	10	10	10



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Due to possible developments of standards as well as of materials, the characteristics and dimensions specified in the present catalogue may only be considered binding after confirmation by ABB SACE.

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