

Economic fuseless protection for motors up to 7.5 kW

Know-how you can trust

As a manufacturer of electrical motors ABB has gathered quite some knowledge in the design of these rather valuable production assets. At ABB, however, motor know-how exceeds mere questions of design, and therefore ABB has made it its business to not only ensure that your motors work properly, but that their special protection needs are also taken care of.

Depending on the application, electrical drives are exposed to strong load variations.

Moreover there is always a possibility for fault within the motor or the installation, so your drives must be protected against:

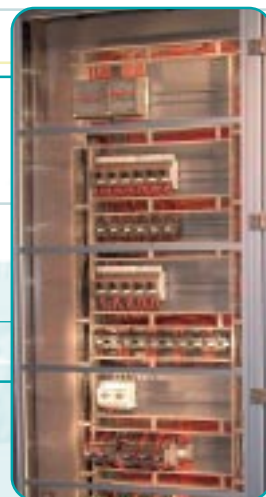
- Overload
- Short Circuit
- Faults in cable or wiring
- Phase fault

All of the above can destroy the motor, the wiring and in a worst case scenario even your whole installation. Therefore, in cases of faults or damage, every motor needs a reliable protection.

ABB is experienced in the production of circuit breakers and electrical protection devices. Now ABB has rounded up its manual motor starter family for the protection of motors in a wattage range up to 7.5 kW: presenting the MS116, your gateway to a more economical motor protection.

The MS116 is ideal for the protection of smaller motors up to 7.5 kW, for example in general applications like:

- packing machines
- wood-industry
- saws and chopping machines
- agricultural machines
- for pumps
- conveyor-systems
- air-conditionings.





MS116: a new asset among manual motor starters

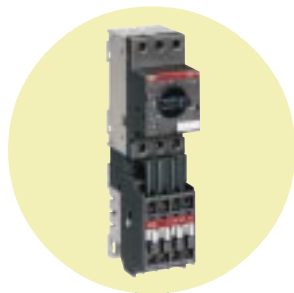
The small and compact MS116 safely switches the circuit off and keeps your facilities available since a restart of a machine can be accomplished in no time at all.

Fuseless protection with MS116:

- Provides for high safety and reliability in the planning and use of electrical installations
- Saves space due to the small dimensions of MS116
- Increases availability of machines and plants
- Saves money in maintenance

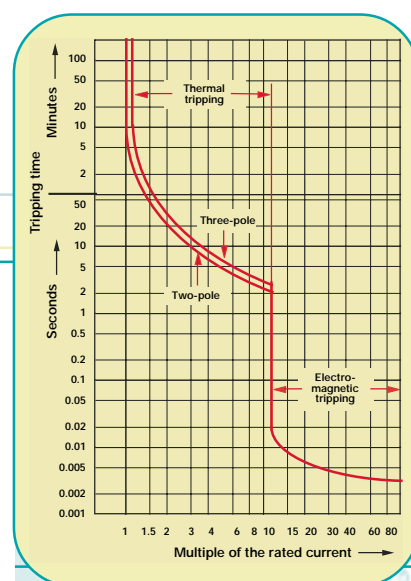
General Technical Data

Rated current:	0.1 ... 16 A
Width:	Only 11 ranges
Rated operating voltage:	45 mm
Tripping Class:	690 V AC / 440 V DC
Max. rated short circuit breaking capacity:	10
Mechanical life time:	16/50 kA
	100.000 switches



Tripping Curve MS 116

In order to form a motor starter combination the MS116 can be equipped with an adapter for either ABB minicontactors series B or for the contactors of ABB's series A, types A9, A12 and A16.

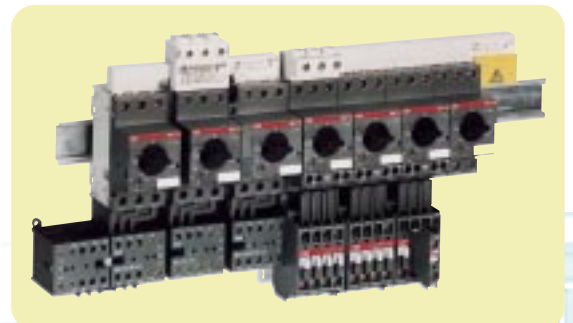




Benefits that speak for themselves

- Functions in one device:
 - switching
 - disconnection
 - motor protection
- The small dimensions of the MS116 make it ideal for situations where only little space is available.
- An auxiliary contact for front mounting is available which does not add to the width of the manual motor starter, therefore further saving space in installation.
- Only 11 device types cover the whole current range up to 16 A, which saves inventory costs.
- The handling of the manual motor starters is reliable since the switch position is always indicated clearly and the turnlever operation is extremely safe.
- Easy and quick installation thanks to the small, fuseless device
- Furthermore the ABB designers took special care to make the MS116 as ecologically friendly as possible: After use the starter can easily be disassembled and the parts are fully recyclable.

Easy handling for customers with MS116 accessories:
 Busbars for easy installation and adapters for forming starter combinations.



Technical Data, Ordering Details

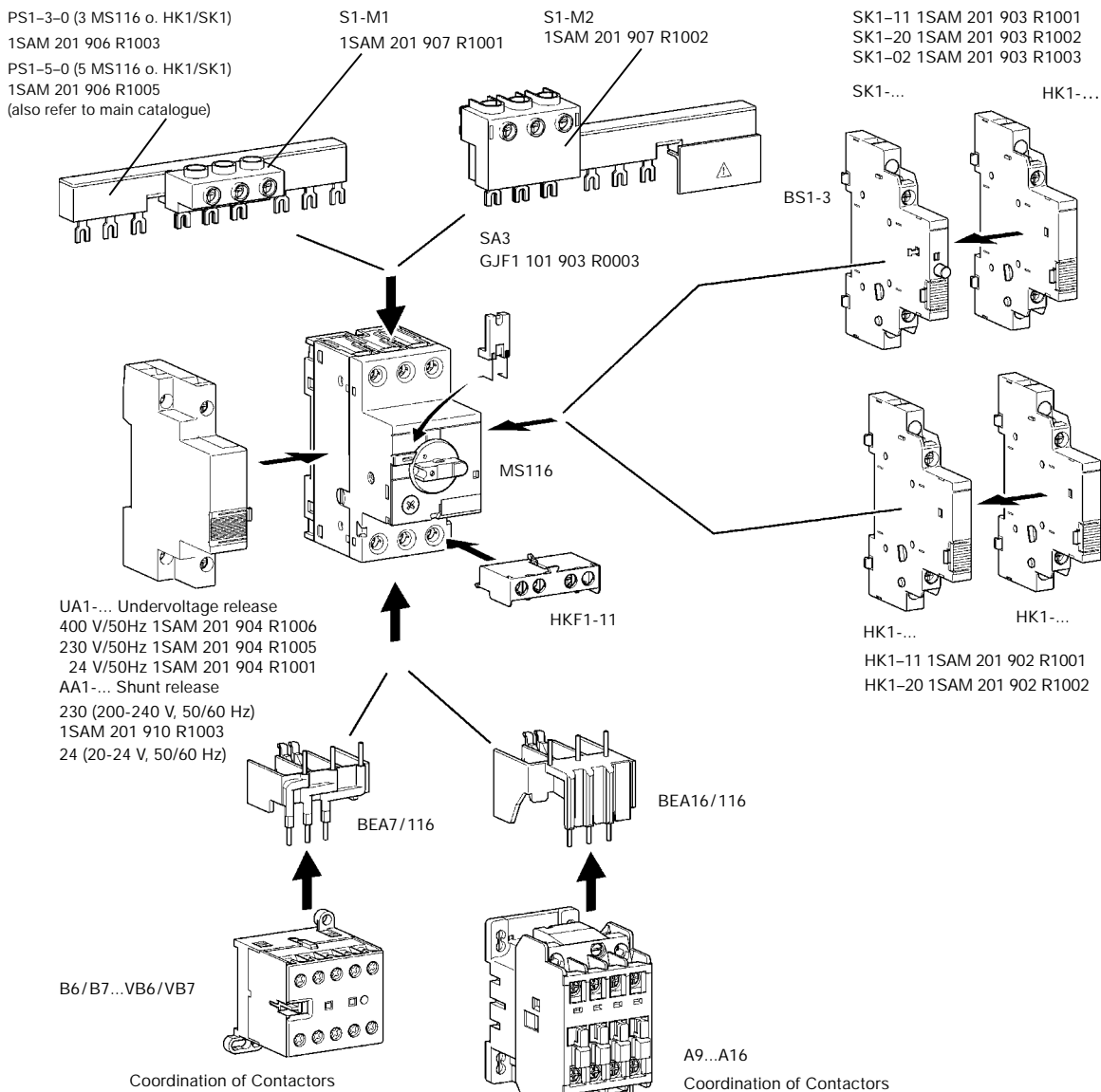
Type	Order Code	Setting Range	Motorload	
			400 V	480 V
		A ... A	in kW	in horse power

with thermal, electromagnetic and phase failure tripping

MS116 - 0,16	1SAM250 000 R 1001	0.1 ... 0.16	-	-
MS116 - 0,25	1SAM250 000 R 1002	0.16 ... 0.25	0.06	-
MS116 - 0,4	1SAM250 000 R 1003	0.25 ... 0.4	0.1	-
MS116 - 0,63	1SAM250 000 R 1004	0.4 ... 0.63	0.18	-
MS116 - 1,0	1SAM250 000 R 1005	0.63... 1.0	0.25	1/2
MS116 - 1,6	1SAM250 000 R 1006	1.0 ... 1.6	0.55	3/4
MS116 - 2,5	1SAM250 000 R 1007	1.6 ... 2.5	1	1
MS116 - 4	1SAM250 000 R 1008	2.5 ... 4.0	1.5	2
MS116 - 6,3	1SAM250 000 R 1009	4.0 ... 6.3	2.2	3
MS116 - 10,0	1SAM250 000 R 1010	6.3 ... 10.0	4	5
MS116 - 12,0	1SAM250 000 R 1010	8.0 ... 12.0	5.5	7 1/2
MS116 - 16,0	1SAM250 000 R 1011	10 ... 16.0	7	10

Enclosures for wall mounting, protection class IP65

IB 116-G	1SAM201 911 R 1000	Insulating enclosure for MS116, grey
IB116-Y	1SAM201 911 R 1001	Insulating enclosure for MS116, yellow/red





A complete assortment up to 100 A

On your side – products and services

The MS116 is only the smallest within a large range of manual motor starters made by ABB. ABB's full motor starter line in the low voltage range can switch and protect motors up to 100 A. Also various other components for the increased performance of your drives and applications are available through ABB worldwide. E. g. various industrial relays like the thermostat machine protection device Custorapid® can usefully enhance the safety of your motor. Your local representative will be pleased to answer all your questions on how ABB's low voltage products can help you in your special case. Talk to us.

MS116	MS325	MS450	MS495-497
			
0.1 A ... 16 A	0.1 A ... 25 A	11 A ... 50 A	11 A ... 100 A

Device type

Approvals

Ships' classification societies

Test mark



Abbreviation
Validity

CSA
Canada

USA

GL
Germany

LRS
Great Britain



ABB STOTZ-KONTAKT GmbH
 P. O. Box 10 16 80
 69006 Heidelberg
 Germany
 Telephone: ++49 (0) 62 21 / 701-0
 Telefax: ++49 (0) 62 21 / 701-729
 Email: desst.info@de.abb.com
 http://www.abb.de/stotz-kontakt