

# AM... Magnetically Latched Contactors, a.c. and d.c. operated



## Application

These contactors provide a safety function in those circuits where standard contactors would drop out in the event of a faulty control circuit supply voltage, i.e. excessive voltage drops or control circuit voltage failures.

They also provide an energy saving function in those circuits where contactors are used for an uninterrupted duty, i.e. distribution or current carrying duty.

## Description

The **AM...** magnetically latched contactors are very similar in construction and dimensions to the **A...** standard contactors of equal rating. Only the electro-magnet and coil have a specific design in order to achieve the latching and de-latching operations.

The operating coil is built with 2 windings which, when energized, create magnetic fields of opposite directions.

The coil windings can be energized from both a.c. and d.c. supplies.

## Operation

- The contactor closes via the **"ON" circuit** and the contactor is held in closed position by the force from a permanent magnet.
- The contactor opens via the **"OFF" circuit** which eliminates the force from the permanent magnet
- On closing and opening the coil windings are automatically controlled through 35X - 36X and 43X - 44X auxiliary contacts.

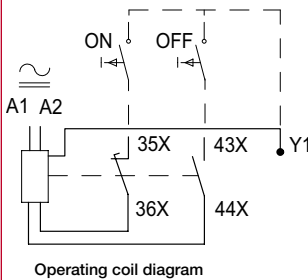
The **AM...** contactors have two resting positions, **open position** and **latched position** and are delivered in latched position.

## Technical Data

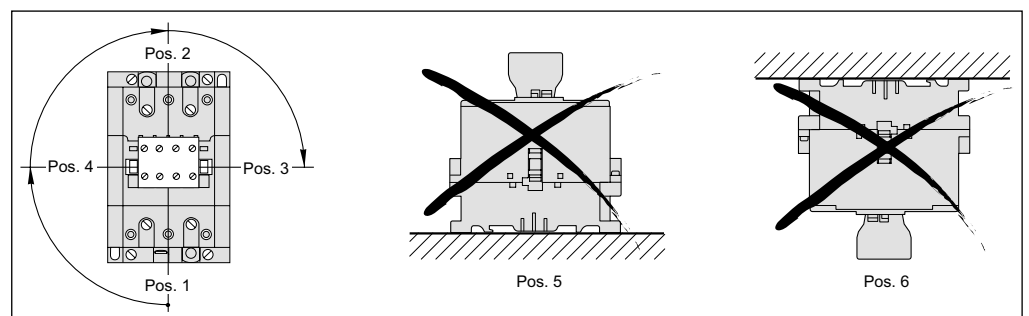
Same technical data as for the **A110** and **A185** contactors with the exception of:

- coil consumption.
- mounting positions: position 5 and 6 is prohibited (see "Technical Data" for mounting position diagram).
- mechanical durability

		AM110	AM185
Coil consumption			
Latching	VA/W	230	350
Holding	VA/W	0	0
De-latching	VA/W	150	300
Coil operating limits		0.85 U <sub>c</sub> min ... 1.1 x U <sub>c</sub> max	
Min impulse length			
ON	ms	100	
OFF	ms	100	
Mechanical durability	ops	50 000	



Operating coil diagram



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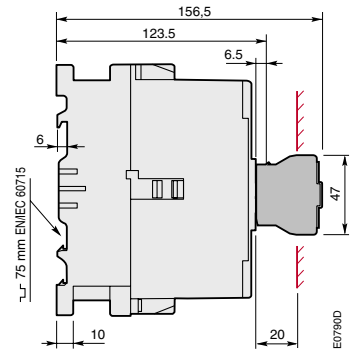
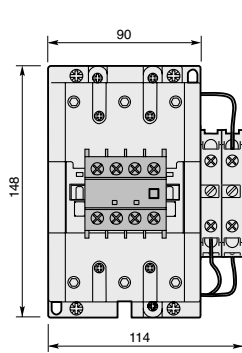
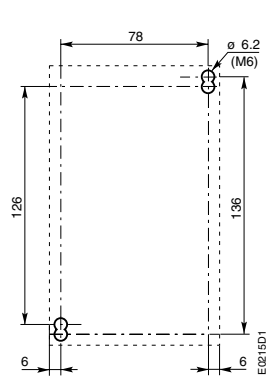
## Ordering Details

IEC	cUL-us		Auxiliary contacts fitted	Type	Order code	Weight kg
Rated power 400 V	Rated current $\theta \leq 40^\circ\text{C}$	3-Phase motor rating	General use rating			
<b>AC-3</b>	<b>AC-1</b>	480 V	600 V		state coil voltage <input type="text"/> (see table below)	state coil voltage code <input type="checkbox"/> <input type="checkbox"/> (see table below)
<b>kW</b>	<b>A</b>	<b>hp</b>	<b>A</b>			<b>Pack<sup>ing</sup></b>
55	160	75	140	2 2	AM110-30-22 <input type="text"/>	1SFL 458 029 R <input type="checkbox"/> <input type="checkbox"/> 22
90	275	125	250	2 2	AM185-30-22 <input type="text"/>	1SFL 498 029 R <input type="checkbox"/> <input type="checkbox"/> 22
						<b>1 piece</b>
						<b>2.15</b>
						<b>3.60</b>

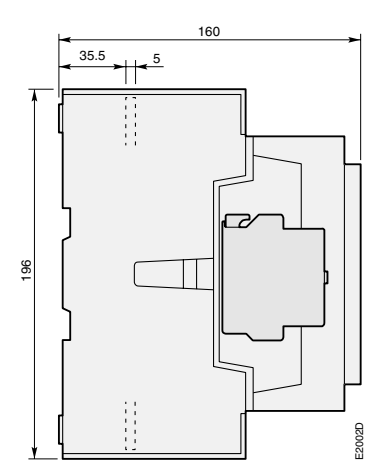
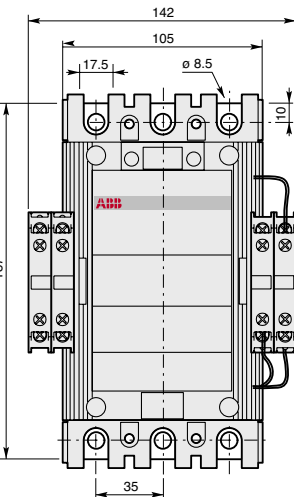
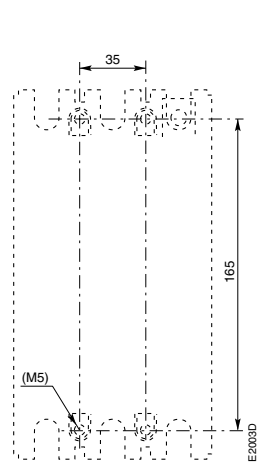
## Coil voltages and codes

Voltage	Voltage	Code
<input type="text"/> 50-60Hz	<input type="text"/> V d.c.	<input type="checkbox"/> <input type="checkbox"/>
110...125	110...125	7 8
220...240	220...240	7 9

## Dimensions (in mm)



### AM110



### AM185

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