

Damper actuators with air dampers, which fit in round air ducts in accordance with DIN EN 1506, for the modulating control or shut-off of volumetric air flows in air-conditioning plants, particularly where space is limited

Typical applications:

- Air after-flow through the building shell
- Air distribution / comfort ventilation
- Air outlets
- Zone controls
- Devices with outside air:
Facade equipment / fan coils / fan-powered boxes / cabin units, etc.
- Exhaust air systems, e.g. sanitary facilities


Documentation

Damper actuators and dampers form a single unit. The technical data sheets for the CM.. actuators and the CM..D.. air damper are authoritative.

Type listing

Type	DN [mm]	Airtight accordance to DIN EN 1751	Resistance coefficient ζ in open position	Fire load [MJ]
CM..-D100	100	Class 3	0.48	4.2
CM..-D125	125	Class 2	0.3	4.6
CM..-D150	150	Class 2	0.3	5.3
CM..-D160	160	Class 2	0.3	5.5

Technical data

Functional data	Angle of rotation	70° ∇
	Direction of rotation	ccw = close, cw = open
	Static Δp via the damper	Max. 1000 Pa (4" w.g.)
	Airtight in accordance with DIN EN 1751	See «Type listing»
	Resistance coefficient ζ	$\Delta p = \zeta \cdot \rho/2 \cdot v^2$
	Resistance coefficient ζ in open position	See «Type listing»
Safety damper blade	Flame class Damper blade	UL 94 HB
	Actuator	UL 94 V-0
	Fire index Damper blade	BKZ 4.3 (CH)
	Actuator	BKZ 5.3 (CH)
	Ambient temperature	-30...+50°C
	Ambient humidity	95% r.h., non-condensating
	Maintenance	Maintenance-free

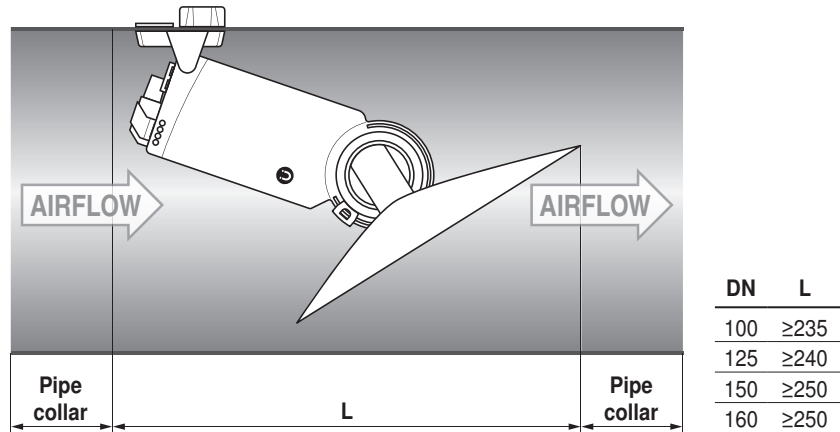
Safety notes


- The device must not be used outside the specified field of application, especially not in aircraft or in any other airborne means of transport.
- The device may not be used for safety applications, e.g. fire protection.
- As a rule, the device is resistant to a multitude of organic solvents and alkaline agents. Unusual ambient conditions will, however, require special clarifications. In particular, the damper may not be used in environments where it may be exposed to chemically aggressive substances, e.g. laboratory exhaust air or fume hood exhaust air (laboratory exhaust systems / fume hoods).
- It may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during installation. The CM..D.. installation instructions (Art. 70949-00001) must be observed in order to ensure smooth operation.
- Adherence to the pipe geometry specified in accordance with DIN EN 1506 must be ensured (no damage).
- The actuator may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Installation instructions

- Pipelines**
- Round pipelines folded spiral-seam pipes (spiro pipes) with 0.5 mm metal gauge in accordance with DIN EN 1506 (previously DIN 24145) with the fold on the outside of the pipe
 - No protruding longitudinal fold facing inward permitted
 - Material: only galvanised sheet steel or chrome steel

Mounting situation For the pipe connection, take into account the pipe collar size (insertion depth) before the actuator fixing and after the damper blade.

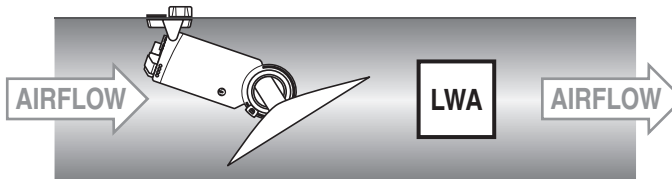


Air direction Observe correct direction of air flow: → Actuator → Damper blade →
Special installation shapes require verification

Piping anchorage Anchorage and alignment are carried out in accordance with the CM..D.. installation instructions (Art. 70949-00001).
The strain relief of the cable is guaranteed in the CM.. actuator.

Fluidic data

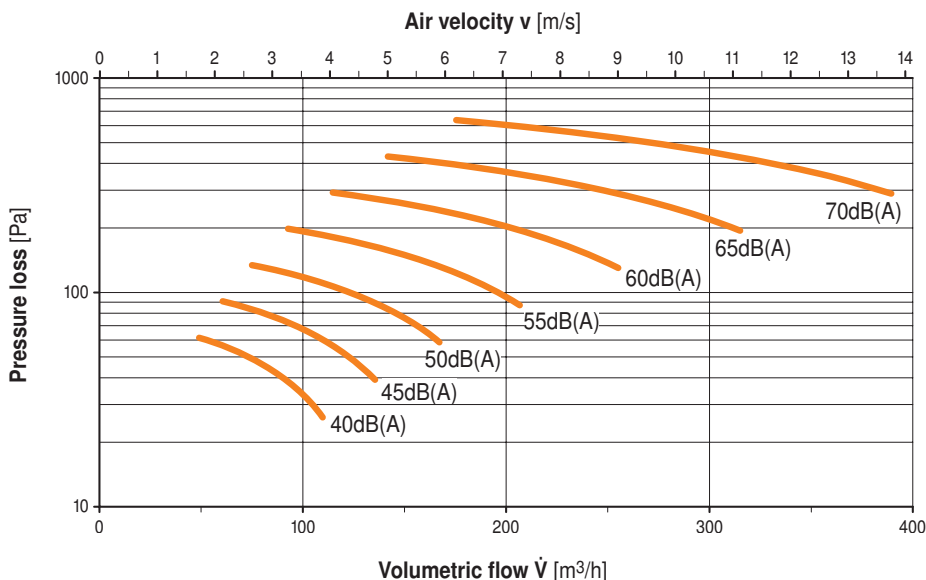
Flow noise The noise caused by the flow of air in the pipe section with a built-in air damper and passed along inside it. In the following chapter, the sound power levels listed are A-evaluated in the duct as a function of dimension, volumetric flow and pressure loss.



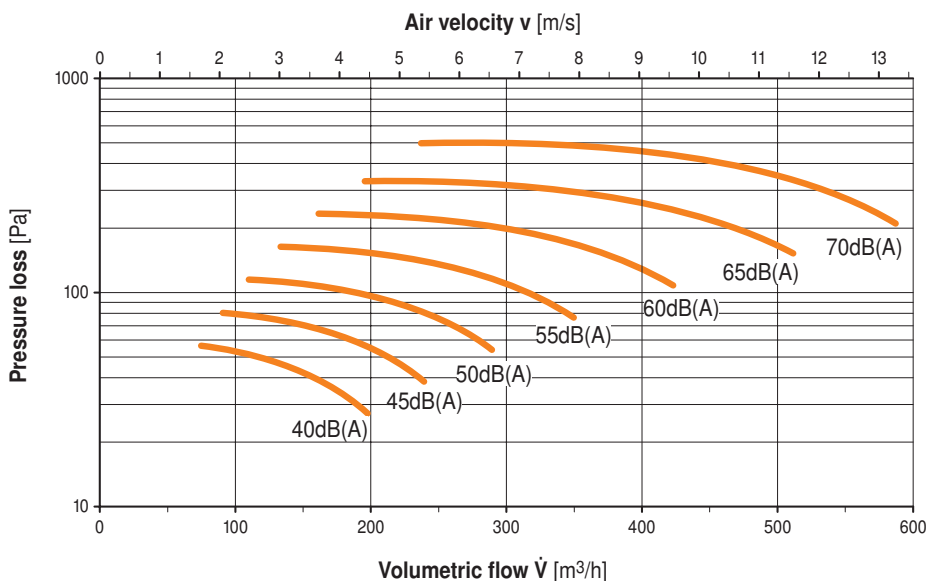
Sound power level L_{WA}

Designation	Unit	Description
L_{WA}	dB(A)	Sound power level with A-evaluation, including correction of the outlet reflection
\dot{V}	l/s or m ³ /h	Volumetric flow
v	m/s	Air velocity
Δp	Pa	Differential pressure / pressure loss

Sound power level L_{WA} for CM..-D100



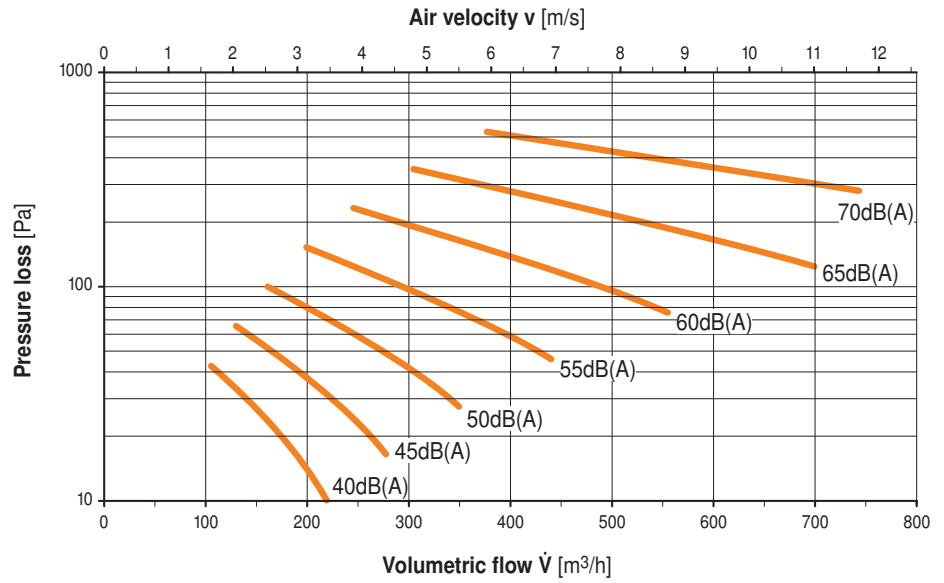
Sound power level L_{WA} for CM..-D125



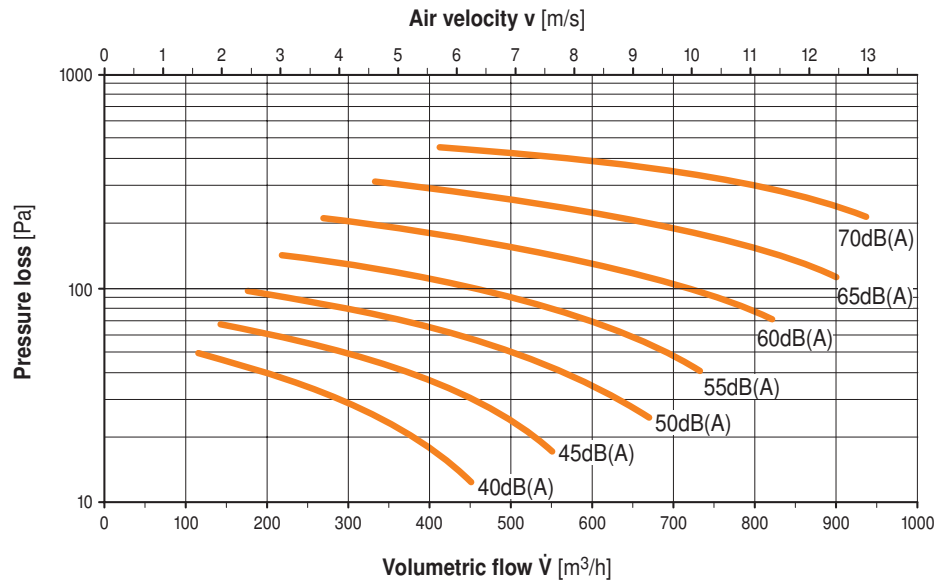
Fluidic data

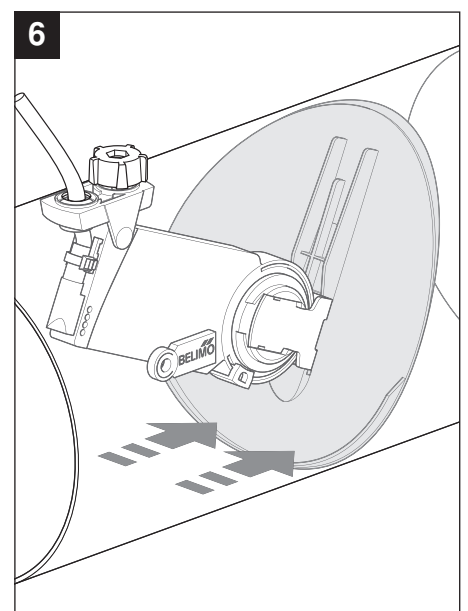
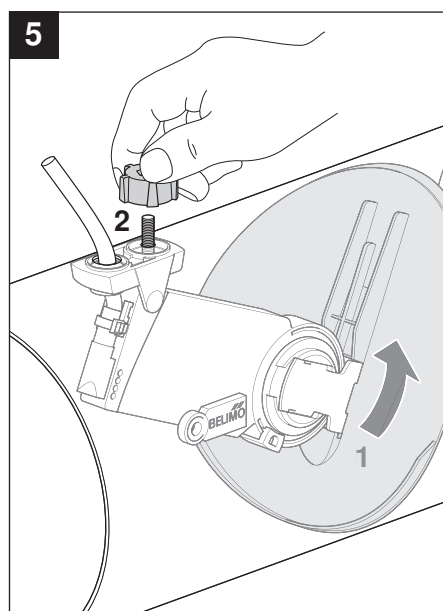
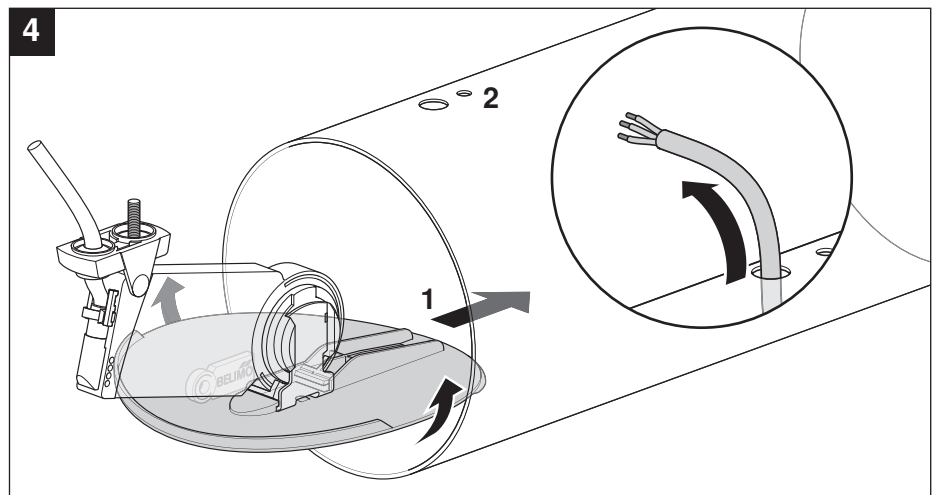
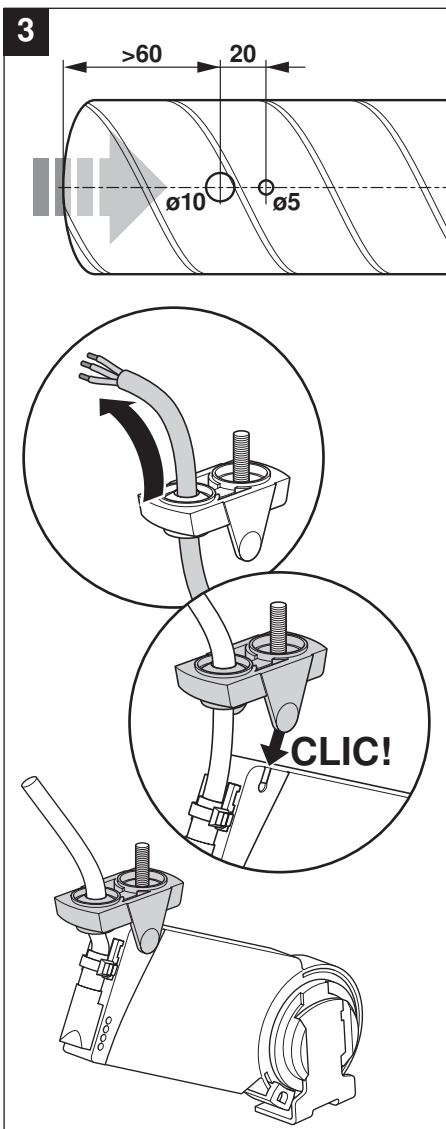
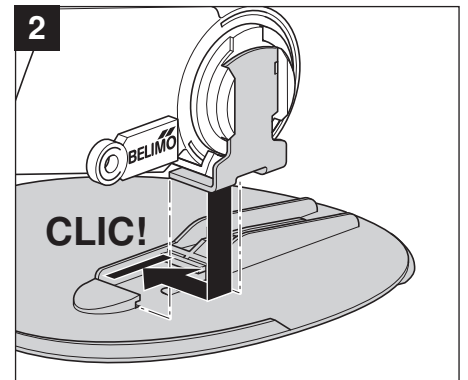
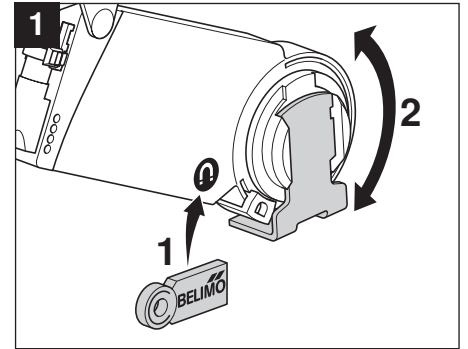
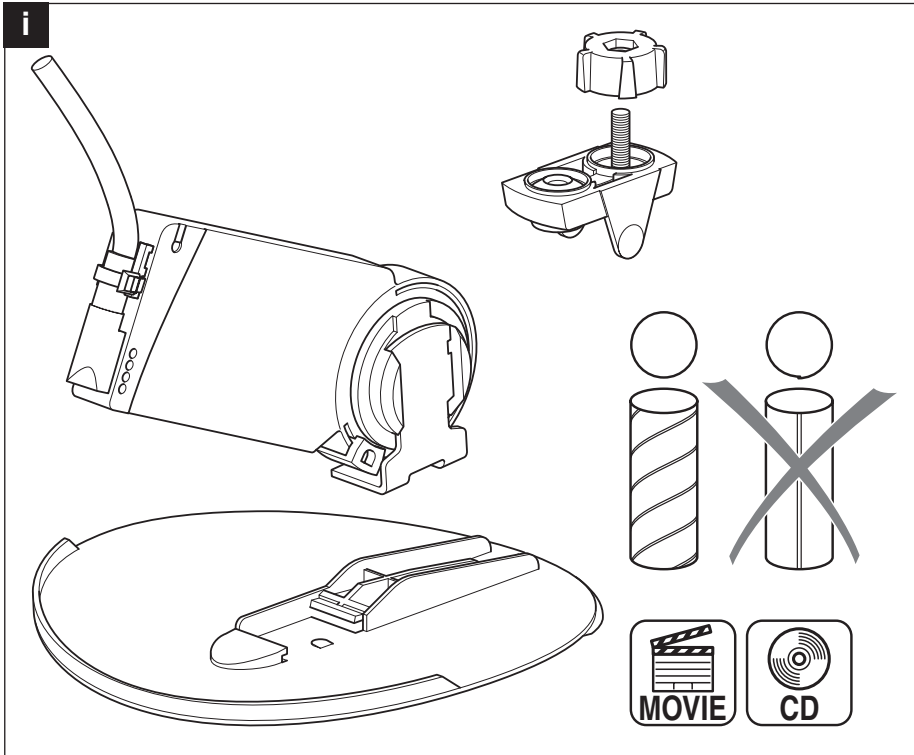
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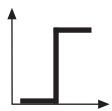
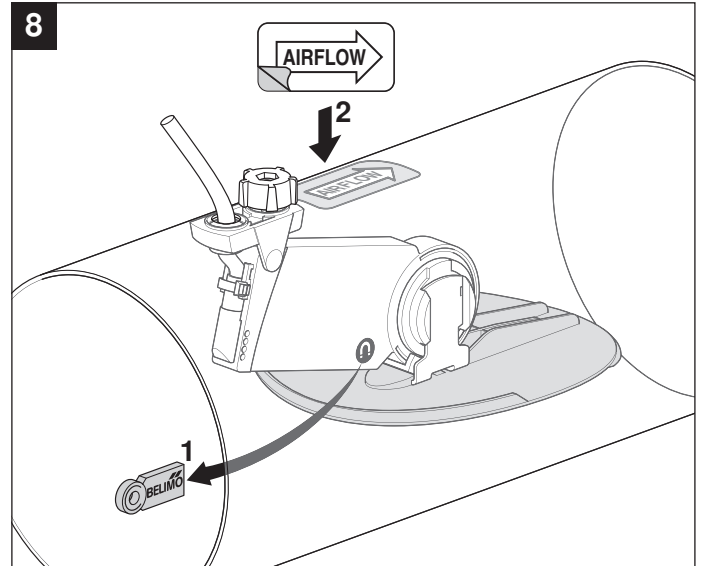
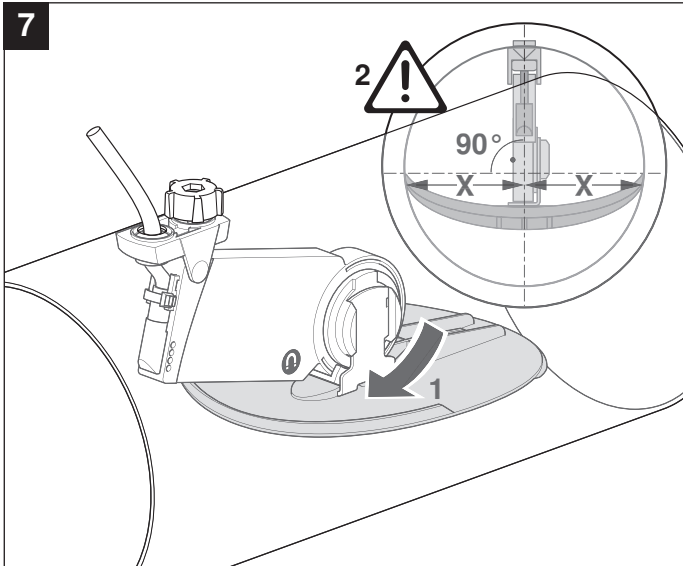
Sound power level L_{WA}
for CM..-D150



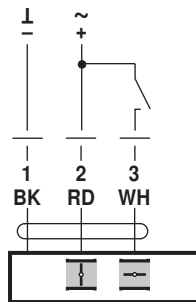
Sound power level L_{WA}
for CM..-D160



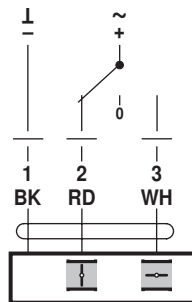




AC 24 V / DC 24 V

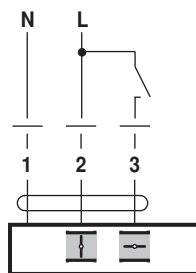


CM24-D..

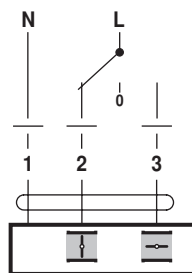


CM24-D..

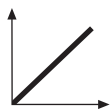
AC 100 ... 240 V ⚠



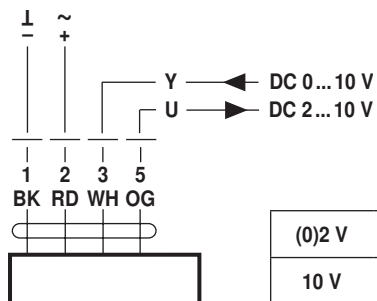
CM230-D..



CM230-D..



AC 24 V / DC 24 V



CM24-SR-D..

(0)2 V	
10 V	