ELECTRIC DRIVES
FOR EVERY DEMAND

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Variable-speed drives

VEMoDRIVE Compact

VEM DRIVE drive systems

VEMoDRIVE Compact

Compact drives are characterised by high energy and resource efficiency and flexibility. They are the ideal drive system for variable-speed pumps and ventilations in the lower output range. They have also proven their quality in global applications with machines with constant torque characteristics and standard requirements for dynamics and speed stability.

Compact, robust, cost-efficient

The compact unit, consisting of motor and inverter, offers significant cost advantages compared to conventional units:

› no project planning for the drives
› no separate mounting space for the inverter is needed
› high vibration strength and high degree of protection as standard guarantee an extended lifetime
› generally no output filter necessary
› no motor cables only unshielded power cable needed
› minimum mounting and installation costs
› minimum startup costs

Versatile combinations

VEMoDRIVE Compact is available with the same options as the conventional setup (motor and frequency inverter separately). Available options for the frequency inverter are external control units and interfaces (e. g. bus interfaces), also input-output and control modules. The motor also have different options which include: type of construction, degree of protection, forced ventilation unit and also brakes and encoders. The possibility of activating the brake and analyzing encoder signals can be enabled on request.

VEMoDRIVE Compact

Drive systems in energy efficiency class IES2 to DIN EN 61800-9-2 with IE2 asynchronous motor*
ME1R, ME2R, self-ventilated; ME1F, ME2F, forced-ventilated

Drive systems in energy efficiency class IES2 to DIN EN 61800-9-2 with IE3 asynchronous motor*
M41R, M42R, self-ventilated; M41F, M42F, forced-ventilated

Drive systems in energy efficiency class IES2 to DIN EN 61800-9-2 with IE5 PM motor**
MPS1R, MPS2R, self-ventilated; MPS1F, MPS2F, forced-ventilated

Sizes 71 to 200
Output range 0.37 kW – 30 kW
Degrees of protection IP 55, IP 54, optionally IP 65, IP 66 acc. to IEC/EN 60034-5
Types of construction IM B3, IM B5, IM B14 and derived types of construction acc. to IEC/EN 60034-7

Development

› VEMoDRIVE Compact, drive systems in energy efficiency class IES2 to DIN EN 50598 with IE4 synchronous reluctance motor
› Drive with isolated frequency converter (low leakage current)

* Motors correspond to IE2 or IE3 to IEC/EN 60034-30-1 in mains-fed operation
** Motors correspond to IE5 to IEC/EN 60034-30-2

Compact drive with IE2 motor

Mains voltage 380 V to 480 V
Types ME1/ME2/MW21..DAN*/KOS**/VSI***

Power kW	2-pole	4-pole	6-pole	8-pole
0.37	ME2R71 K2..	ME1R71 GY4..	ME2R80 K6..	ME2F90 S8..
0.55	ME2R71 G2..	ME2R80 K4..	ME1R80 GY6..	ME2F90 L8..
0.75	ME2R80 K2..	ME1R80 GY4..	ME2R90 S6..	ME2F100 L8..
1.1	ME2R80 G2..	ME2R90 S4..	ME1R90 LW6..	ME1F100 LY8..
1.5	ME2R90 S2..	ME1R90 LW4..	ME2R100 L6..	ME1F112 M8..
2.2	ME2R90 L2..	ME1R100 S4..	ME1R112 MX6..	MW21F132 S8..
3	ME2R100 LY2..	ME1R100 LW4..	ME1R112 M6.. MW21R132 S6..	ME2F132 M8..
4	ME1R112 M2..	ME1R112 MZ4..	ME2R132 M6..	ME1F160 M8..
5.5	ME1R112 ML2.. ME1R132 SY2T..	ME1R112 MW4.. ME2R132 SY4..	ME1R132 MX6..	ME1F160 MX8..
7.5	ME1R112 MW2.. ME1R132 SX2T..	ME1R132 M4..	ME1R160 M6..	ME1F160 L8..
11	ME1R160 M2..	ME1R160 M4..	on request	on request
15	ME1R160 MX2..	ME1R160 L4..	on request	on request
18.5	ME1R160 L2..	ME1R180 M4..	on request	on request
22	ME1R180 M2..	ME1R180 L4..	on request	on request
30	ME1R200 L2..	ME1R200 L4..	on request	on request

Compact drive with IE3 motor

Mains voltage 380 V to 480 V
Types M41/M42..DAN*/KOS**/VSI***

Power kW	2-pole	4-pole	6-pole	8-pole
0.37	M42R71 K2..	M41R71 GY4..	M41R80 K6..	M42F90 SY8..
0.55	M41R71 GY2..	M41R80 K4..	M41R80 G6..	M41F90 L8..
0.75	M42R80 K2..	M41R80 G4..	M41R90 SY6..	M41F100 LY8..
1.1	M41R80 GY2..	M41R90 SY4..	M41R90 L6..	M41F100 LW8..
1.5	M42R90 S2..	M41R90 L4..	M41R100 LX6..	M41F112 M8..
2.2	M41R90 LY2..	M41R100 LY4..	M41R112 MV6..	M42F132 S8..
3	M41R100 LY2..	M41R100 LX4..	M41R132 S6..	M41F132 M8..
4	M41R112 MY2..	M41R112 MW4..	M41R132 M6..	M41F160 M8..
5.5	M41R112 MX2.. M41R132 S2T..	M43R132 S4..	M41R132 MX6..	M41F160 MX8..
7.5	M41R132 SX2..	M41R132 M4..	M41R160 M6..	M41F160 L8..
11	M41R160 M2..	M41R160 M4..	on request	on request
15	M41R160 MX2..	M41R160 L4..	on request	on request
18.5	M41R160 L2..	M41R180 M4..	on request	on request
22	M41R180 M2C..	M41R180 L4..	on request	on request
30	M41R200 L2..	M41R200 L4C..	on request	on request

Compact drive with IE5 motor

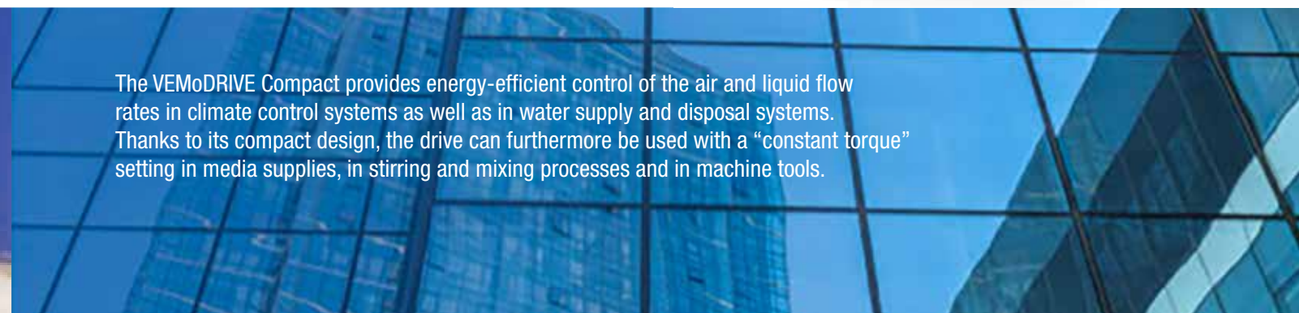
Mains voltage 380 V to 480 V
Types MPS1/MPS2..DAN*/KOS**/VSI***

Power kW	3000 rpm	1500 rpm	1000 rpm	750 rpm
0.37	MPS2R71 K4..	MPS1R71 G4..	on request	on request
0.55	MPS2R71 G4..	MPS2R80 K4..	on request	on request
0.75	MPS2R80 KY4..	MPS1R80 G4..	on request	on request
1.1	MPS2R80 G4..	MPS2R90 SX4..	on request	on request
1.5	MPS2R90 S4..	MPS1R90 L4..	on request	on request
2.2	MPS2R90 L4..	MPS2R100 L4..	on request	on request
3	MPS2R100 L4..	MPS1R100 LX4..	on request	on request
4	MPS1R112 MY4..	MPS1R112 M4..	on request	on request
5.5	MPS1R132 SY4 T..	MPS1R132 S4T..	on request	on request
7.5	MPS1R132 S4 T..	MPS1R132 M4..	on request	on request
11	MPS1R132 M4..	MPS1R160 M4..	on request	on request
15	MPS1R132 M4..	MPS1R160 L4..	on request	on request
18.5	MPS2R132 M4..	MPS1R180 M4..	on request	on request
22	MPS1R160 M4..	MPS2R180 M4..	on request	on request
30	MPS2R160 M4..	MPS1R180 L4..	on request	on request

* Danfoss/Vacon frequency converter
** Kostal frequency converter (1 AC 200 V to 230 V (0.37 kW to 1.1 kW) or 3 AC 200 V to 480 V)
*** CG/emotron frequency converter

Special compact drives

Compact drive for railway applications
Compact drive with axial frequency converter



The VEMoDRIVE Compact provides energy-efficient control of the air and liquid flow rates in climate control systems as well as in water supply and disposal systems. Thanks to its compact design, the drive can furthermore be used with a “constant torque” setting in media supplies, in stirring and mixing processes and in machine tools.