



- OVERLOAD-CAPABLE
- POWERFUL
- ROBUST
- ENVIRONMENTALLY FRIENDLY

With our IE5 SynRM motor series, we supply the suitable motor for the frequency converter.



IE5-RS1R 90 L4
IM B3 1.5 kW



VEM GmbH
Pirnaer Landstraße 176
01257 Dresden
Germany

Contact person:
Matthias Pape

Mobile: +49 151 1622 5886
E-mail: matthias.pape@vem-group.com

Reinhold Maleikat

Mobile: +49 151 1421 7172
E-mail: reinhold.maleikat@vem-group.com

www.vem-group.com

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ELECTRIC DRIVES
FOR EVERY DEMAND



IE5 - SynRM

Synchronous reluctance motors
for frequency inverter operation



VEM-IE5-SynRM

High efficiency and overload capacity

Our SynRM motor series differs from a standard asynchronous motor in its rotor, which consists solely of stamped laminations in addition to the shaft. Neither permanent magnets nor copper or aluminum are used in the rotor. The motors offer high efficiency and low heat generation. Furthermore, they maintain high efficiency over a wide operating range and are permanently capable of handling strong overloads.

We have successfully tested the following frequency converters:

- Kostal INVEOR MP
- Mitsubishi A 840
- SwissDrives GA500 C-line
- KSB Pumpdrive
- Danfoss FC302 / 102
- ABB ACQ580-01
- Yaskawa GA700
- CG Emotron

SynRM	P	M _n	n	η	I	cos φ	ΔT _{wi}
50 Hz	[kW]	[Nm]	[1/min]	[%]	[A]		[K]
IE5-RS1R 90 SX4	0.75	4.78	1,500	86.7	1.9	0.69	25
IE5-RS1R 90 S4	1.1	7.00	1,500	88.1	2.6	0.71	20
IE5-RS1R 90 L4	1.5	9.56	1,500	89.1	3.6	0.71	30
IE5-RS2R 100 L4	2.2	14	1,500	90.2	4.9	0.77	30
IE5-RS1R 112 MY4	3	19.1	1,500	91.0	7.2	0.76	30
IE5-RS1R 112 MX4	4	25.46	1,500	91.8	9.4	0.76	35
IE5-RS2R 132 S4	5.5	35.02	1,500	92.5	12.5	0.75	35
IE5-RS2R 132 M4	7.5	47.74	1,500	93.2	16.0	0.79	52
IE5-R43R 160 M4	11	70	1,500	93.84	22.3	0.82	a. A.
IE5-R43R 160 L4	15	95	1,500	94.41	28	0.82	a. A.
IE5-R43R 180 M4	18.5	117	1,500	94.64	34.5	0.83	a. A.
IE5-R43R 180 L4	22	140	1,500	94.86	49.7	0.8	a. A.
IE5-R43R 200 L4	30	191	1,500	95.32	61.7	0.83	a. A.
IE5-R43R 225 S4	37	235	1,500	95.55	72.5	0.8	a. A.
IE5-R43R 225 M4	45	286	1,500	95.77	88	0.79	a. A.
IE5-R43R 225 MX4	55	350	1,500	96	112	0.76	a. A.
100 Hz							
IE5-RL1R 90 SY4 *	0.75	2.39	3,000	84.6	2.2	0.61	30
IE5-RL1R 90 SY4 *	1.1	3.5	3,000	86.2	2.8	0.7	35
IE5-RL1R 90 SY4 *	1.5	4.78	3,000	87.4	3.5	0.74	41
IE5-RS1R 90 LY4	2.2	7	3,000	88.9	5.1	0.73	25
IE5-RS2R 100 LY4	3	9.55	3,000	89.9	6.7	0.77	35
IE5-RS2R 100 LX4	4	12.73	3,000	90.7	8.7	0.73	40
IE5-RS2R 132 SY4	5.5	17.51	3,000	91.6	12.5	0.75	35
IE5-RS2R 132 S4	7.5	23.87	3,000	92.4	16.0	0.76	30

* Motor types correspond to our lightweight series