



ELECTRIC DRIVES

FOR EVERY DEMAND

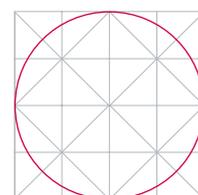


Roller table motors

Heavy duty design
for converter operation

VEM  DRIVE
drive systems

www.vem-group.com





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Heavy duty design for converter operation

Drives for rolling mills

Robust to meet the toughest demands

The drive elements of the mill and driving tables in rolling mills are required to meet especially exacting electrical and mechanical demands. VEM roller table motors are ideally prepared to stand up to such extreme operating conditions, because they

- › cope with all operating modes, such as continuous, intermittent and short-time duty, as well as start-up, braking and reversing functions
- › withstand the high ambient temperatures of the molten steel
- › handle the overloads arising should jammed stock block the transport system
- › offer trouble-free synchronous operation of group drives also under changing loads
- › have been demonstrating their function capabilities and reliability for many decades
- › can be adapted perfectly to practically any individual drive requirements in converter-fed operation.

Internationally proven quality

VEM roller table motors are available in numerous versions. With windings designed specifically for converter-fed operation, they satisfy all the demands placed on modern drive technologies with frequency conver-

ter control. VEM drives of this type are operating reliably for renowned European and global enterprises in the metallurgical industry.

Versatile and adaptable

Robust grey-cast versions with housings with circular ribs are ideally suited for the extreme conditions in roller mill operation. In converter-fed operation, the operational speeds can be adapted perfectly to practically any individual drive requirements. As the control span is generally in the lower frequency range, project-specific winding adaptation and the use of frequency converters with automatic voltage boosting or field-oriented control are recommended. The windings are optimised for converter-fed operation. To help with project planning detailed operational data sheets are available. They are based on windings in thermal class 155. As option it is also possible to choose thermal class 180. This can be used especially for an increase in the frequency of operation.

In already existing, older installations it is also possible to revert to the heavy duty series ARB that was specially designed for mains operation and can survive a blocking period lasting several minutes.

| Series | ARC |
|----------------------|--|
| Sizes | 112 to 400 |
| Power range | 0.04 – 290 kW |
| Type of protection | IP 55 acc. to IEC/EN 60034-5 |
| Type of construction | IM B3, IM B35 and derived types of construction acc. to IEC/EN 60034-7 |
| Type of cooling | IC 410 acc. to IEC/EN 60034-6 |



Heavy-duty roll table motors for converter-fed operation are very much in demand for rolling mills.

| | 4-pole 1500 rpm | | 6-pole 1000 rpm | | 8-pole 750 rpm | | 10-pole 600 rpm | | 12-pole 500 rpm | |
|------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | P _{eff} kW | M _{max} Nm |
| ARC 112 M | 2.3 | 47 | 1.5 | 45 | 1.1 | 38 | 0.55 | 25 | 0.4 | 23 |
| ARC 112 MX | 2.5 | 49 | 1.9 | 57 | 1.5 | 54 | 0.8 | 35 | 0.6 | 30 |
| ARC 112 MZ | 3.0 | 60 | 2.2 | 66 | 1.7 | 65 | 0.85 | 40 | 0.7 | 40 |
| ARC 132 S | 3.0 | 61 | 2.6 | 79 | 1.8 | 57 | 1.1 | 50 | 0.8 | 45 |
| ARC 132 M | 4.4 | 93 | 3.5 | 103 | 2.5 | 87 | 1.5 | 75 | 1.1 | 60 |
| ARC 132 MX | 6.2 | 120 | 4.2 | 130 | 3.0 | 110 | 1.8 | 90 | 1.5 | 90 |
| ARC 160 S | 5.5 | 105 | 4.8 | 145 | 3.6 | 117 | 2.8 | 135 | 1.5 | 90 |
| ARC 160 M | 7.7 | 150 | 6.5 | 195 | 5.0 | 174 | 3.0 | 150 | 2.75 | 165 |
| ARC 160 MX | 8.0 | 160 | - | - | - | - | - | - | - | - |
| ARC 160 L | 10.2 | 200 | 7.0 | 205 | 7.3 | 255 | 4.0 | 200 | 3.0 | 180 |
| ARC 180 S | 8.8 | 175 | 7.6 | 228 | 6.5 | 257 | 4.5 | 225 | 3.0 | 180 |
| ARC 180 M | 11.0 | 215 | 9.5 | 283 | 7.5 | 316 | 6.5 | 330 | 4.5 | 270 |
| ARC 180 MX | 14.0 | 270 | 11.0 | 320 | 8.0 | 325 | 7.0 | 350 | 5.5 | 320 |
| ARC 200 M | 15.0 | 307 | 12.5 | 373 | 9.0 | 390 | 8.5 | 420 | 6.5 | 390 |
| ARC 200 L | 18.5 | 367 | 15.0 | 450 | 11.0 | 410 | 9.0 | 440 | 7.0 | 420 |
| ARC 200 LX | 20.0 | 380 | 19.5 | 580 | 14.0 | 520 | - | - | - | - |
| ARC 225 M | 22.0 | 425 | 16.5 | 496 | 13.0 | 480 | 11.0 | 540 | 8.5 | 510 |
| ARC 225 MX | 25.0 | 480 | 18.0 | 535 | 14.0 | 540 | 12.0 | 600 | 9.0 | 540 |
| ARC 250 S | 32.0 | 624 | 27.0 | 706 | 17.5 | 590 | 13.5 | 660 | 10.0 | 600 |
| ARC 250 M | 40.0 | 778 | 22.0 | 540 | 22.0 | 715 | 17.0 | 840 | 12.0 | 705 |
| ARC 280 S | 50.0 | 968 | 37.0 | 1075 | 28.0 | 1040 | 22.5 | 1080 | 18.5 | 1080 |
| ARC 280 M | 60.0 | 1169 | 44.0 | 1265 | 35.0 | 1320 | 27.5 | 1350 | 22.5 | 1320 |
| ARC 280 MX | 70.0 | 1330 | 48.0 | 1608 | 37.0 | 1685 | 37.5 | 1800 | 27.5 | 1650 |
| ARC 315 M | 95.0 | 1780 | 75.0 | 1945 | 55.0 | 2100 | 45.0 | 2190 | 30.0 | 1790 |
| ARC 315 L | 132.0 | 2040 | 90.0 | 2140 | 68.0 | 2140 | 55.0 | 2670 | 37.5 | 2190 |
| ARC 315 LX | 150.0 | 2884 | 100.0 | 2800 | 85.0 | 2724 | 60.0 | 2050 | 45 | 2640 |
| ARC 355 M | 160.0 | 3066 | 140.0 | 4031 | 90.0 | 3461 | 68.0 | 3274 | 55 | 3216 |
| ARC 355 MX | - | - | 160.0 | 4607 | 110.0 | 4230 | 80.0 | 3852 | 66 | 3859 |
| ARC 400 L | 240.0 | 6340 | 210.0 | 6400 | 170.0 | 6450 | - | - | 110.0 | 6000 |
| ARC 400 LX | 290.0 | 7500 | 240.0 | 7460 | 200.0 | 7750 | - | - | 132.0 | 7320 |

Please refer to our catalogues for technical details. The catalogues are available in printed or in digital version on DVD. They are also available in the internet.



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For detailed information
please visit our website.