



Van der Graaf
Power Transmission Equipment



TM215-40

Drummotor

Product information

www.vandergraafpte.nl

Selection table TM215-40

| TYPE | Power (kW) | Beltspeed at 50 Hz (m/s) Beltpull (N) | | | | | | | | | | Min. L (mm) Design A / B | | Full load curr. at 400 V/50 Hz (A) | Weight L=500 (kg) | |
|------------|------------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------------------|-----|---|-------------------------|-----|
| | | 4,70 1110 | 3,90 1340 | 3,50 1495 | 2,80 1865 | 2,50 2090 | | | | | | | | | | |
| 275 | 5,50 | 4,70 1110 | 3,90 1340 | 3,50 1495 | 2,80 1865 | 2,50 2090 | | | | | | | 500 | 550 | 11,0 | 79 |
| 275 ZV | | 2,00 2610 | 1,70 3075 | 1,50 3485 | 1,40 3730 | 1,30 4020 | 1,10 4750 | | | | | | | | | |
| 255 | 4,00 | 4,70 810 | 3,90 975 | 3,50 1085 | 2,80 1355 | 2,50 1520 | | | | | | | 500 | 550 | 7,9 | 76 |
| 255 Z | | 2,00 1900 | 1,70 2235 | | | | | | | | | | | | | |
| 255 ZV | | 1,50 2535 | 1,40 2715 | 1,30 2925 | 1,10 3455 | 1,00 3800 | 0,90 4220 | | | | | | | | | |
| 255 ST3_ZV | | 0,80 4650 | | | | | | | | | | | | | | |
| 440 | 3,00 | 2,90 985 | 2,40 1190 | 2,00 1425 | 1,80 1585 | 1,40 2035 | 1,25 2280 | | | | | | 500 | 550 | 6,6 | 76 |
| 440 ZV | | 1,00 2850 | 0,85 3355 | 0,75 3800 | 0,70 4070 | 0,65 4385 | | | | | | | | | | |
| 430 | 2,20 | 2,90 720 | 2,40 870 | 2,10 995 | 1,70 1230 | 1,40 1495 | 1,25 1670 | 1,00 2090 | 0,90 2320 | | | 425 | 500 | 4,7 | 73 | |
| 430 ZV | | 0,85 2460 | 0,70 2985 | 0,65 3215 | 0,60 3485 | 0,55 3800 | 0,50 4180 | 0,45 4645 | | | | | | | | |
| 430 ST3_ZV | | 0,40 5115 | | | | | | | | | | 450 | | | | |
| 420 | 1,50 | 2,90 490 | 2,40 595 | 2,10 680 | 1,70 840 | 1,40 1020 | 1,25 1140 | 1,00 1425 | 0,90 1585 | 0,80 1780 | 0,70 2035 | 425 | 500 | 3,6 | 71 | |
| 420 ZV | | 0,60 2375 | 0,55 2590 | 0,50 2850 | 0,45 3165 | 0,40 3565 | | | | | | | | | | |
| 420 ST3_ZV | | 0,35 3985 | 0,30 4650 | | | | | | | | | 450 | | | | |
| 620 | 1,50 | 1,60 890 | 0,85 1675 | | | | | | | | | 500 | 550 | 3,7 | 76 | |
| 620 ZV | | 0,36 3960 | 0,34 4190 | 0,31 4595 | 0,28 5090 | | | | | | | | | | | |
| 415 | 1,10 | 2,90 360 | 2,40 435 | 2,10 500 | 1,80 580 | 1,40 745 | 1,25 835 | 1,00 1045 | 0,90 1160 | 0,80 1305 | 0,70 1495 | 425 | 500 | 2,9 | 69 | |
| | | 0,60 1740 | | | | | | | | | | | | | | |
| 415 Z | | 0,55 1900 | 0,50 2090 | 0,45 2320 | | | | | | | | | | | | |
| 415 ZV | | 0,40 2615 | | | | | | | | | | | | | | |
| 615 ZV | 1,10 | 0,36 2905 | 0,34 3075 | 0,31 3370 | 0,28 3730 | 0,26 4020 | | | | | | 425 | 500 | 2,9 | 73 | |
| 615 ST3_ZV | | 0,23 4450 | 0,20 5115 | | | | | | | | | 450 | | | | |
| 610 | 0,75 | 1,40 510 | 1,20 595 | 0,90 790 | 0,85 840 | 0,65 1095 | 0,60 1190 | 0,50 1425 | 0,45 1585 | 0,40 1780 | | 425 | 500 | 2,5 | 71 | |
| 610 Z | | 0,36 1980 | 0,34 2095 | 0,31 2300 | | | | | | | | | | | | |
| 610 ZV | | 0,28 2545 | 0,26 2740 | | | | | | | | | | | | | |
| 610 ST3_ZV | | 0,23 3035 | 0,20 3490 | 0,18 3875 | 0,17 4105 | | | | | | | | | | | 450 |

Available standard facewidth's: 425 - 450 - 500 - 550 - 600 - 650 - 700 - 750 - 800 - 850 -900 - 950 - 1000 mm.

Minimum facewidth can deviate, see cable exit options.

The total weight of a drummotor grows approx. 5 kg per 100 mm.

When an electro-mechanical brake is fitted, the minimum facewidth is increased by 100 mm.

Available torque Nm: (Beltpull N x Drumdiameter m) / 2

Selection table TM215-40 Dahlander

| TYPE | Power (kW) | Beltspeed at 50 Hz (m/s) Beltpull (N) | | | | | | | | | | Min. L (mm) Design A / B | | Full load curr. at 400 V/50 Hz (A) | Weight L=500 (kg) | |
|---------|---------------|--|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|--|-----------------------------|-----|---|-------------------------|----|
| | | 2,40/4,80 870/595 | 2,10/4,20 995/680 | 1,70/3,40 1230/840 | 1,40/2,80 1495/1020 | 1,25/2,50 1670/1140 | 1,00/2,00 2090/1425 | 0,90/1,80 2320/1585 | | | | | | | | |
| 430/240 | 2,20/ 3,00 | 0,85/1,70 2460/1675 | 0,70/1,40 2985/2035 | 0,65/1,30 3215/2190 | 0,60/1,20 3485/2375 | 0,55/1,10 3800/2590 | 0,50/1,00 4180/2850 | 0,45/0,90 4645/3165 | | | | | 500 | 550 | 5,0/ 6,9 | 76 |
| ZV | | 0,40/0,80 5115/3490 | | | | | | | | | | | | | | |
| ST3_ZV | | | | | | | | | | | | | | | | |
| 418/230 | 1,30/ 2,20 | 2,40/4,80 515/435 | 2,10/4,20 590/500 | 1,70/3,40 725/615 | 1,40/2,80 880/745 | 1,25/2,50 990/835 | 1,00/2,00 1235/1045 | 0,90/1,80 1370/1160 | 0,80/1,60 1545/1305 | 0,70/1,40 1765/1495 | | | 425 | 500 | 3,1/ 4,6 | 73 |
| | | 0,60/1,20 2060/1740 | | | | | | | | | | | | | | |
| ZV | | 0,55/1,10 2245/1900 | 0,50/1,00 2470/2090 | 0,45/0,90 2745/2320 | 0,40/0,80 3090/2615 | | | | | | | | | | | |
| ST3_ZV | | 0,35/0,70 3455/2925 | 0,30/0,60 4030/3410 | 0,27/0,54 4480/3790 | 0,25/0,50 4835/4090 | | | | | | | | | | | |

Available standard facewidth's: 425 - 450 - 500 - 550 - 600 - 650 - 700 - 750 - 800 - 850 - 900 - 950 - 1000 mm.






Minimum facewidth can deviate, see cable exit options.

The total weight of a drummotor grows approx. 5 kg per 100 mm.

When an electro-mechanical brake is fitted, the minimum facewidth is increased by 100 mm.

Available torque Nm: (Beltpull N x Drumdiameter m) / 2

Options

| | Specification | Standard | Optional |
|--|--|-------------------|---|
|  <h2>CONSTRUCTION</h2> | Shafts and bolts | Mild steel | Stainless steel |
| | Endflanges | Cast iron | Stainless steel |
| | Shell | Mild steel | Stainless steel |
| | Junctionbox | Cast iron | Stainless steel or polyamide |
| | Cable | | Shielded or non-shielded |
| | Sealing mild steel | RB | RBS, HD-1 |
| | Sealing stainless steel | CR | FS, HD-1, HD-2 |
|  <h2>SHELL</h2> | Crowned | • | |
| | Cylindrical | | • |
| | Balanced | | • |
| | Lagging, cold vulcanised | | • |
| | Lagging, hot vulcanised | | • |
| | Lagging, FDA approved | | • |
| | Fitted with grooves, patterns | | • |
| Sprockets | | • | |
|  <h2>ELECTRO MOTOR</h2> | Three-phase asynchronous | • | |
| | Power supply (P < 3kW) | 230/400 V - 50 Hz | Other voltages and frequencies on request |
| | Power supply (P ≥ 3kW) | 400/690 V - 50 Hz | Other voltages and frequencies on request |
| | Two speed (Dahlander) | | • |
| | Twin drive (double power) | | • |
| | Insulation class | F | • |
| | Thermal protection | | Bi-metal or thermistor |
| Run by frequency inverter | • | | |
|  <h2>OTHER OPTIONS</h2> | Food grade oil | | • |
| | Backstop, mechanical | | • |
| | Brake, electro mechanical | | • |
| | Inclined or vertical position | | • |
| | Other facewidth's | | • |
| | Different shaft designs | | • |
| | Encoder or sensorbearing in drum motor | | • |
| Sensorbearing in tail drum | | • | |
|  <h2>CERTIFICATES</h2> | CE | • | |
| | UL | | • |
| | CSA | | • |
| | ATEX zone 22, dust | | • |
| | IP69K | | • |

Our drummotors, an overview

| Drummotor type | Drum diameter (mm) | Shaft diameter (mm) | Power (kW) | Speed (m/s) | Beltpull (N) |
|----------------|--------------------|---------------------|--------------|--------------|--------------|
| TM80B20 | 80 | 20 | 0,07 - 0,12 | 0,11 - 1,15 | 598 |
| TM100B25 | 100 | 25 | 0,08 - 0,37 | 0,007 - 3,60 | 1300 |
| TM113B25 | 113 | 25 | 0,12 - 0,55 | 0,008 - 4,40 | 1150 |
| TM127_25 | 127 | 25 | 0,25 - 1,10 | 0,016 - 2,60 | 4100 |
| TM138_25 | 138 | 25 | 0,25 - 1,10 | 0,017 - 2,80 | 3800 |
| TM160_25 | 160 | 25 | 0,25 - 0,75 | 0,31 - 3,30 | 1135 |
| TM160_30 | 160 | 30 | 0,25 - 2,20 | 0,11 - 4,00 | 3000 |
| TM215_30 | 215 | 30 | 0,25 - 2,20 | 0,27 - 5,30 | 1900 |
| TM215_40 | 215 | 40 | 0,75 - 5,5 | 0,17 - 4,70 | 5115 |
| TM215B50 | 215 | 50 | 1,5 - 7,0 | 0,18 - 0,62 | 11500 |
| TM273_40 | 273 | 40 | 0,75 - 5,50 | 0,21 - 5,00 | 4355 |
| TM315_40 | 315 | 40 | 0,75 - 5,50 | 0,40 - 5,20 | 4020 |
| TM315_50 | 315 | 50 | 2,2 - 11,0 | 0,34 - 4,40 | 7125 |
| TM315B60 | 315 | 60 | 3,0 - 11,0 | 0,22 - 1,40 | 12790 |
| TM400_50 | 400 | 50 | 2,2 - 11,0 | 0,40 - 4,80 | 5700 |
| TM400_60 | 400 | 60 | 3,0 - 22,0 | 0,45 - 4,20 | 10960 |
| TM500_60 | 500 | 60 | 3,0 - 22,0 | 0,55 - 4,40 | 8905 |
| TM500A75 | 500 | 75 | 15,0 - 30,0 | 1,00 - 3,20 | 14250 |
| TM500A100 | 500 | 100 | 15,0 - 30,0 | 0,55 - 1,25 | 25300 |
| TM620A75 | 620 | 75 | 15,0 - 30,0 | 1,25 - 3,90 | 11400 |
| TM630A100 | 630 | 100 | 37,0 - 55,0 | 1,60 - 4,00 | 21970 |
| TM800A100 | 800 | 100 | 37,0 - 55,0 | 2,00 - 5,10 | 17575 |
| TM800A130 | 800 | 130 | 55,0 - 132,0 | 2,00 - 4,50 | 35625 |

Contact us

Van der Graaf B.V.
De Weijert 14
8325 EM Vollenhove
The Netherlands
Tel.: 0031 527 241 441
sales@vandergraafpte.nl

Representatives

Check our website for your regional representative
www.vandergraafpte.nl