



GENERAL INFORMATION

| | | | |
|--------------------|--------------|------------------------|--------|
| Type | D1EA63M4AB35 | Efficiency Class | IE1 |
| Pout [kW] | 0,12 | Vibration Class | A |
| Speed [rpm] | 1390 | Weight [kg] | |
| Frame | 63M | Degree of Protection | IP55 |
| Current [A] | 0,72 | Cooling Method | IC 411 |
| cos φ | 0,68 | Insulation Class | F |
| Rotation | CW-CCW | Temperature Class | B |
| Duty | S1 | Construction | IM B35 |
| Ambient Temp. [°C] | -20...+40 | Altitude above sea [m] | 1000 |

| | | | | | | |
|---|-----|-------|--------|---------|--------|---------|
|   | | 3~MOT | Type | DM 63-4 | | |
| | | S1 | IM B35 | IP 55 | I.CL.F | IE1 |
| | V | Hz | A | kW | cos φ | 1 / min |
| Δ | 220 | 50 | 0,72 | 0,12 | 0,68 | 1390 |
| Y | 380 | 50 | 0,42 | 0,12 | 0,68 | 1390 |
| Y | 460 | 60 | 0,42 | 0,14 | 0,64 | 1668 |

ELECTRICAL DATA (RAW MEASUREMENT DATA)

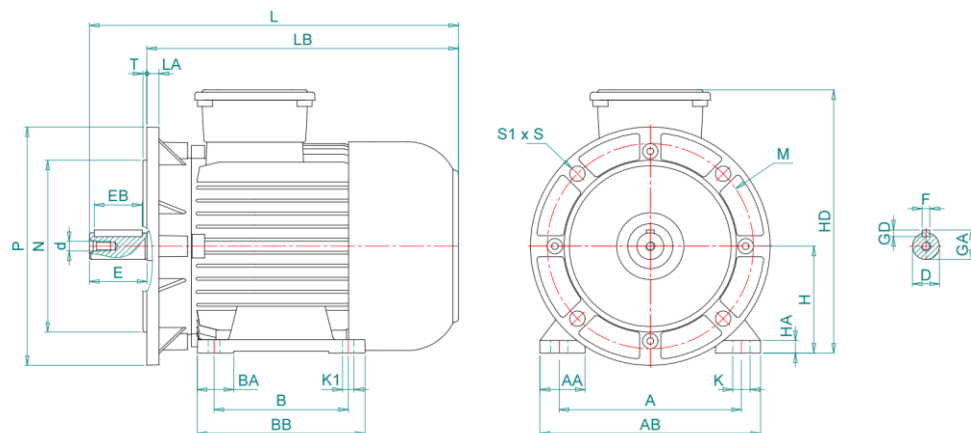
| | | | | | | | | | | |
|----------------------|---------|--------|------------------|---------|--------|---------|------------|---------------|------|------|
| V1 | %Load | T [Nm] | I [A] | rpm | P2 [W] | cos φ | Efficiency | Hz | | |
| 220 | 100 | 0,82 | 0,72 | 1390 | 120 | 0,68 | 50 | 50 | | |
| Locked Rotor Current | Ia [A] | 1,3 | Breakdown Torque | Mk [Nm] | 1,86 | Ia / In | 1,81 | Mk / Mn | 2,26 | |
| Locked Rotor Torque | Ma [Nm] | 1,8 | No Load Current | [A] | 0,38 | Ma / Mn | 2,18 | No Load Power | [W] | 76,6 |

MECHANICAL DATA

| | | | |
|---------------|----------------|--------------------------------|-----------|
| DE Bearing | 6201-ZZ | Sound Pressure - 50 Hz - dB[B] | 75 |
| NDE Bearing | 6201-ZZ | Sound Pressure - 60 Hz - dB[B] | 76 |
| Fixed Bearing | YES | Housing Material | Aluminium |
| Lubrication | - | DE Shield Material | Aluminium |
| Grease Amount | - | Terminal Box Material | Polyamide |
| Grease Type | - | Cable Entry | PG 11 |
| Feather Key | 4*4*16 | Cable Gland Position | 4 |
| Balance | G 1,6 Half Key | | |




MECHANICAL DIMENSIONS

| | | | | | | | | | | | | | | | |
|-----|----|----|-----|-------|----|----|-------|-----|-------|-----|----|-----|----|----|------|
| A | AA | AB | AC | AD | B | B' | BA | BB | C | D | d | E | EB | F | GA |
| 100 | 26 | 23 | 125 | - | 80 | - | 23 | 100 | 40 | 11 | M4 | 23 | 16 | 4 | 12,5 |
| GD | H | HA | HC | HD | K | K1 | L | LA | LB | M | N | P | S | S1 | T |
| 4 | 63 | 7 | 113 | 160,5 | 7 | 7 | 205,2 | 9,5 | 195,7 | 115 | 95 | 140 | 10 | 4 | 3 |



GENERAL INFORMATION

| | | | |
|--------------------|--------------|------------------------|--------|
| Type | D1EA71M4CB35 | Efficiency Class | IE1 |
| Pout [kW] | 0,55 | Vibration Class | A |
| Speed [rpm] | 1360 | Weight [kg] | |
| Frame | 71M | Degree of Protection | IP55 |
| Current [A] | 3,1 | Cooling Method | IC 411 |
| cos φ | 0,68 | Insulation Class | F |
| Rotation | CW-CCW | Temperature Class | B |
| Duty | S1 | Construction | IM B35 |
| Ambient Temp. [°C] | -20...+40 | Altitude above sea [m] | 1000 |

| | | | | | | |
|---|-----|-------|--------|-----------|--------|---------|
|    | | 3~MOT | Type | DM C 71-4 | | |
| | | S1 | IM B35 | IP 55 | I.CL.F | IE1 |
| | V | Hz | A | kW | cos φ | 1 / min |
| Δ | 220 | 50 | 3,1 | 0,55 | 0,68 | 1360 |
| Y | 380 | 50 | 1,8 | 0,55 | 0,68 | 1360 |
| Y | 460 | 60 | 1,8 | 0,66 | 0,66 | 1632 |

ELECTRICAL DATA (RAW MEASUREMENT DATA)

| V1 | %Load | T [Nm] | I [A] | rpm | P2 [W] | cos φ | Efficiency | Hz |
|-----|-------|--------|-------|------|--------|-------|------------|----|
| 220 | 100 | 3,86 | 3,1 | 1360 | 550 | 0,68 | 70 | 50 |
| 220 | 75 | 2,81 | 2,7 | 1400 | 412,5 | 0,58 | 69,51 | 50 |
| 220 | 50 | 1,86 | 2,6 | 1415 | 275 | 0,41 | 68,23 | 50 |

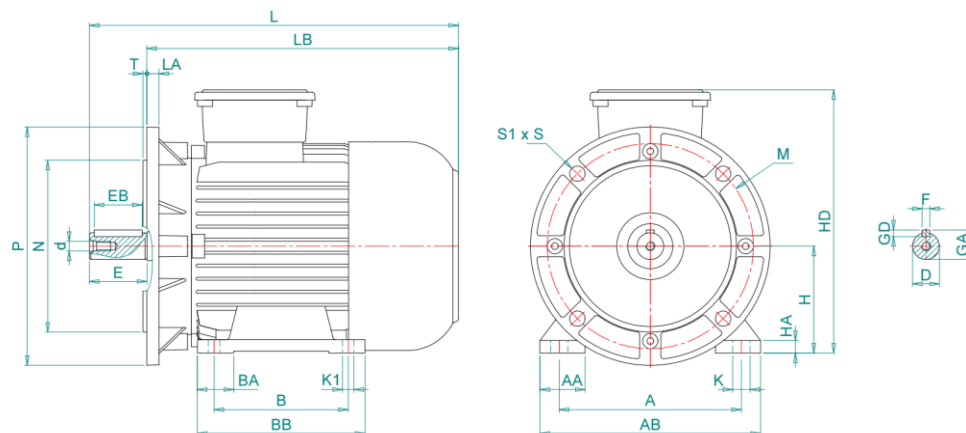
| | | | | | |
|----------------------|---------|------|------------------|---------|------|
| Locked Rotor Current | Ia [A] | 6 | Breakdown Torque | Mk [Nm] | 4,8 |
| | Ia / In | 1,94 | | Mk / Mn | 1,24 |
| Locked Rotor Torque | Ma [Nm] | 4,5 | No Load Current | [A] | 3,4 |
| | Ma / Mn | 1,17 | No Load Power | [W] | 128 |

MECHANICAL DATA

| | | | |
|---------------|----------------|--------------------------------|-----------|
| DE Bearing | 6202-ZZ | Sound Pressure - 50 Hz - dB[B] | 75 |
| NDE Bearing | 6202-ZZ | Sound Pressure - 60 Hz - dB[B] | 76 |
| Fixed Bearing | NO | Housing Material | Aluminium |
| Lubrication | - | DE Shield Material | Aluminium |
| Grease Amount | - | Terminal Box Material | Polyamide |
| Grease Type | - | Cable Entry | PG 11 |
| Feather Key | 5*5*22 | Cable Gland Position | 4 |
| Balance | G 1,6 Half Key | | |

MECHANICAL DIMENSIONS

| | | | | | | | | | | | | | | | |
|-----|------|------|-------|-----|----|----|-------|-----|-------|-----|-----|-----|----|----|-----|
| A | AA | AB | AC | AD | B | B' | BA | BB | C | D | d | E | EB | F | GA |
| 112 | 30,1 | 23,5 | 139,6 | - | 90 | - | 23,5 | 108 | 45 | 14 | M5 | 30 | 22 | 5 | 16 |
| GD | H | HA | HC | HD | K | K1 | L | LA | LB | M | N | P | S | S1 | T |
| 5 | 71 | 9,5 | 129,5 | 177 | 11 | 7 | 247,5 | 8,7 | 238,8 | 130 | 110 | 160 | 10 | 4 | 3,5 |



GENERAL INFORMATION

| | | | |
|--------------------|-----------------|------------------------|--------|
| Type | D2EA90S4AB35SYY | Efficiency Class | IE2 |
| Pout [kW] | 1,1 | Vibration Class | A |
| Speed [rpm] | 1430 | Weight [kg] | |
| Frame | 90S | Degree of Protection | IP55 |
| Current [A] | 4,3 | Cooling Method | IC 411 |
| cos φ | 0,78 | Insulation Class | F |
| Rotation | CW-CCW | Temperature Class | B |
| Duty | S1 | Construction | IM B35 |
| Ambient Temp. [°C] | -20...+40 | Altitude above sea [m] | 1000 |

| | | | | | | | | |
|----------------------------------|--------|----------|---------|------|-------|---------|------|------|
| USE WITH VARIABLE SPEED DRIVE | | CE | | TS | | QR | | |
| ONLY ACC. EU REGULATION 640/2009 | | | | | | | | |
| 3~MOT | Type | DM 90S-4 | | | | | | |
| S1 | IM B35 | IP 55 | I.C.L.F | η% | | | | |
| | V | Hz | A | kW | cos φ | 1 / min | LOAD | EFF. |
| Δ | 230 | 50 | 4,3 | 1,1 | 0,78 | 1430 | %75 | 81,6 |
| Y | 400 | 50 | 2,5 | 1,1 | 0,78 | 1430 | | |
| Y | 480 | 60 | 2,5 | 1,32 | 0,77 | 1715 | %50 | 80,6 |

ELECTRICAL DATA (RAW MEASUREMENT DATA)

| V1 | %Load | T [Nm] | I [A] | rpm | P2 [W] | cos φ | Efficiency | Hz |
|-----|-------|--------|-------|------|--------|-------|------------|----|
| 400 | 100 | 7,35 | 2,5 | 1430 | 1100 | 0,78 | 81,4 | 50 |
| 400 | 75 | 5,41 | 2,1 | 1455 | 825 | 0,69 | 81,6 | 50 |
| 400 | 50 | 3,61 | 1,8 | 1470 | 555 | 0,55 | 80,6 | 50 |

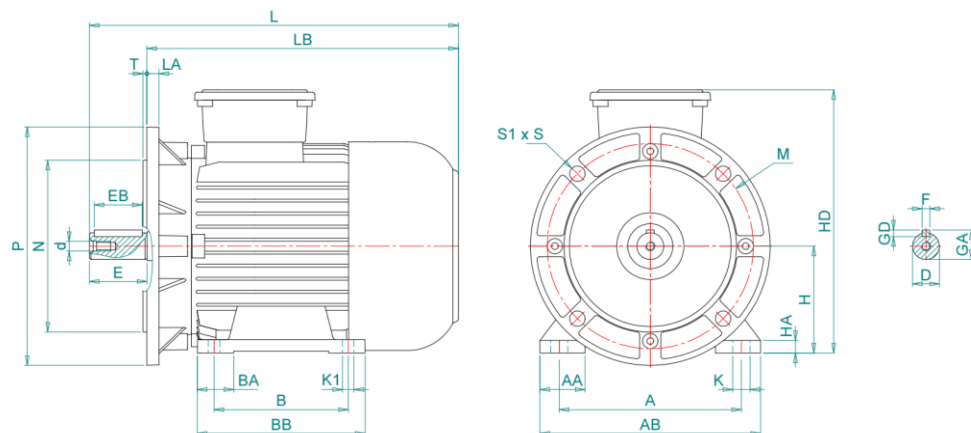
| | | | | | |
|----------------------|---------|------|------------------|---------|------|
| Locked Rotor Current | Ia [A] | 23 | Breakdown Torque | Mk [Nm] | 18 |
| | Ia / In | 5,35 | | Mk / Mn | 2,45 |
| Locked Rotor Torque | Ma [Nm] | 15 | No Load Current | [A] | 1,6 |
| | Ma / Mn | 2,04 | No Load Power | [W] | 150 |

MECHANICAL DATA

| | | | |
|---------------|----------------|--------------------------------|-----------|
| DE Bearing | 6205-ZZ | Sound Pressure - 50 Hz - dB[B] | 75 |
| NDE Bearing | 6205-ZZ | Sound Pressure - 60 Hz - dB[B] | 76 |
| Fixed Bearing | YES | Housing Material | Aluminium |
| Lubrication | - | DE Shield Material | Aluminium |
| Grease Amount | - | Terminal Box Material | Polyamide |
| Grease Type | - | Cable Entry | PG 11 |
| Feather Key | 8*7*40 | Cable Gland Position | 4 |
| Balance | G 1,6 Half Key | | |





MECHANICAL DIMENSIONS

| A | AA | AB | AC | AD | B | B' | BA | BB | C | D | d | E | EB | F | GA |
|-----|------|------|-----|-----|-------|----|-----|-----|-----|-----|-----|-----|----|----|-----|
| 140 | 40,1 | 34 | 178 | - | 100 | - | 34 | 130 | 56 | 24 | M8 | 50 | 40 | 8 | 27 |
| GD | H | HA | HC | HD | K | K1 | L | LA | LB | M | N | P | S | S1 | T |
| 7 | 90 | 13,1 | 177 | 225 | 16,26 | 10 | 338 | 10 | 328 | 165 | 130 | 200 | 12 | 4 | 3,5 |



GENERAL INFORMATION

| | | | |
|--------------------|---------------|------------------------|--------|
| Type | D2EA112M4CB35 | Efficiency Class | IE2 |
| Pout [kW] | 5,5 | Vibration Class | A |
| Speed [rpm] | 1440 | Weight [kg] | 33 |
| Frame | 112M-C | Degree of Protection | IP55 |
| Current [A] | 11,3 | Cooling Method | IC 411 |
| cos φ | 0,79 | Insulation Class | F |
| Rotation | CW-CCW | Temperature Class | B |
| Duty | S1 | Construction | IM B35 |
| Ambient Temp. [°C] | -20...+40 | Altitude above sea [m] | 1000 |

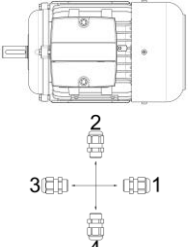
| | | | | | | | |
|--|--------|------------|----------|-------|---------|------|------|
|     | | | | | | | |
| USE WITH VARIABLE SPEED DRIVE | | | | | | | |
| ONLY ACC. EU REGULATION 640/2009 | | | | | | | |
| 3~MOT | Type | D2EA112M4C | | | | | |
| S1 | IM B35 | IP 55 | I.C.L.F. | | η% | | |
| V | Hz | A | kW | cos φ | 1 / min | LOAD | EFF. |
| Δ 400 | 50 | 11,3 | 5,5 | 0,79 | 1440 | %75 | 88,7 |
| Δ 480 | 60 | 11,3 | 6,6 | 0,78 | 1730 | %50 | 88,5 |

ELECTRICAL DATA

| V1 | %Load | T [Nm] | I [A] | rpm | P2 [W] | cos φ | Efficiency | Hz |
|-----|-------|--------|-------|------|--------|-------|------------|----|
| 400 | 100 | 36,81 | 11,3 | 1445 | 5570 | 0,8 | 88,9 | 50 |
| 400 | 75 | 27,27 | 9 | 1454 | 4155 | 0,74 | 89,9 | 50 |
| 400 | 50 | 17,88 | 7,2 | 1474 | 2760 | 0,61 | 90,4 | 50 |

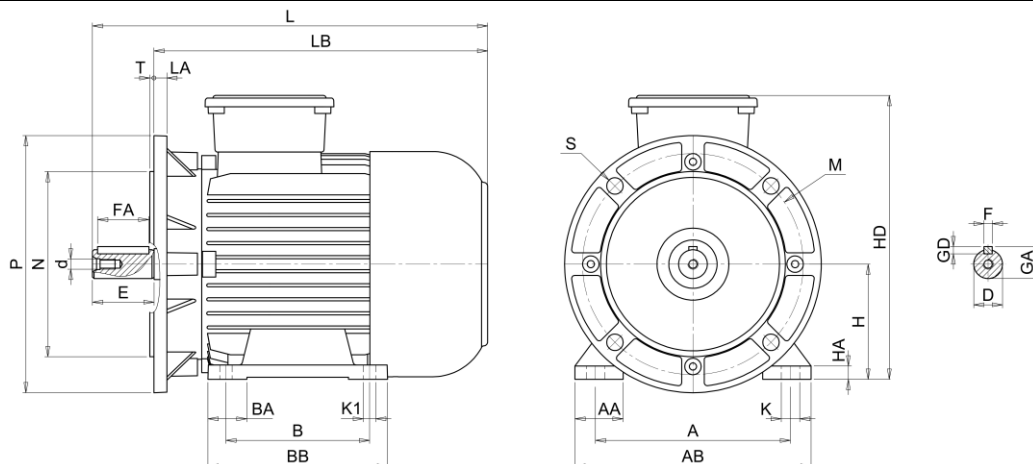
| | | | | | |
|----------------------|---------|------|------------------|---------|------|
| Locked Rotor Current | Ia [A] | 69 | Breakdown Torque | Mk [Nm] | 111 |
| | Ia / In | 6,11 | | Mk / Mn | 3,02 |
| Locked Rotor Torque | Ma [Nm] | 95 | No Load Current | [A] | 5,8 |
| | Ma / Mn | 2,58 | No Load Power | [W] | 287 |

MECHANICAL DATA

| | | | | |
|---------------|----------------|--------------------------------|-----------|--|
| DE Bearing | 6206-ZZ | Sound Pressure - 50 Hz - dB[B] | 83 | Cable Gland Position  |
| NDE Bearing | 6206-ZZ | Sound Pressure - 60 Hz - dB[B] | 86 | |
| Fixed Bearing | NO | Housing Material | Aluminium | |
| Lubrication | - | DE Shield Material | Aluminium | |
| Grease Amount | - | Terminal Box Material | Polyamide | |
| Grease Type | - | Cable Entry | PG 16 | |
| Feather Key | 8*7*50 | Cable Gland Position | 4 | |
| Balance | G 1,6 Half Key | | | |

MECHANICAL DIMENSIONS

| A | AA | AB | AC | AD | B | B' | BA | BB | C | D | d | E | F | FA | GA |
|-----|-----|-----|----|-----|-----|----|-----|-----|-----|-----|-----|-----|----|----|----|
| 190 | 51 | 228 | - | - | 140 | - | 38 | 175 | - | 28 | M10 | 60 | 8 | 50 | 31 |
| GD | H | HA | HC | HD | K | K1 | L | LA | LB | M | N | P | S | S1 | T |
| 7 | 112 | 14 | - | 276 | 18 | 12 | 425 | 13 | 358 | 215 | 180 | 250 | 15 | - | 4 |



GENERAL INFORMATION

| | | | |
|--------------------|---------------|------------------------|--------|
| Type | D2EA132M4AB35 | Efficiency Class | IE2 |
| Pout [kW] | 11 | Vibration Class | A |
| Speed [rpm] | 1455 | Weight [kg] | |
| Frame | 132M-C | Degree of Protection | IP55 |
| Current [A] | 22 | Cooling Method | IC 411 |
| cos φ | 0,81 | Insulation Class | F |
| Rotation | CW-CCW | Temperature Class | B |
| Duty | S1 | Construction | IM B35 |
| Ambient Temp. [°C] | -20...+40 | Altitude above sea [m] | 1000 |

| | | | | | | | |
|----------------------------------|--------|-----------|---------|-------|---------|------|------------|
| USE WITH VARIABLE SPEED DRIVE | | CE | | TS | | QR | |
| ONLY ACC. EU REGULATION 640/2009 | | | | | | | |
| 3~MOT | Type | DM 132M-4 | | | | | |
| S1 | IM B35 | IP 55 | I.C.L.F | | η% | | IE2 - 89,8 |
| V | Hz | A | kW | cos φ | 1 / min | LOAD | EFF. |
| Δ 400 | 50 | 22 | 11 | 0,81 | 1455 | %75 | 88 |
| Δ 480 | 60 | 22 | 13,2 | 0,8 | 1746 | %50 | 86,7 |

ELECTRICAL DATA (RAW MEASUREMENT DATA)

| V1 | %Load | T [Nm] | I [A] | rpm | P2 [W] | cos φ | Efficiency | Hz |
|-----|-------|--------|-------|------|--------|-------|------------|----|
| 400 | 100 | 72,2 | 22 | 1455 | 11000 | 0,81 | 89,8 | 50 |
| 400 | 75 | 53,74 | 17,6 | 1466 | 8250 | 0,77 | 88 | 50 |
| 400 | 50 | 35,51 | 14,3 | 1479 | 5500 | 0,64 | 86,7 | 50 |

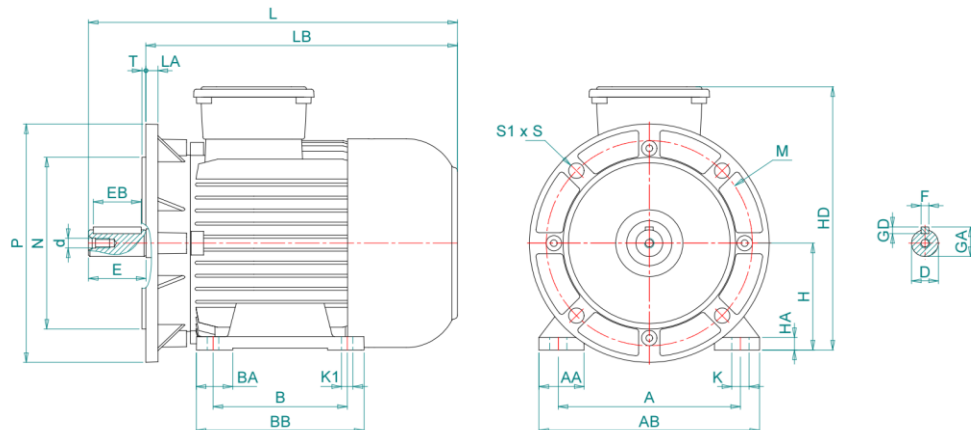
| | | | | | |
|----------------------|---------|------|------------------|---------|------|
| Locked Rotor Current | Ia [A] | 157 | Breakdown Torque | Mk [Nm] | 257 |
| | Ia / In | 7,14 | | Mk / Mn | 3,56 |
| Locked Rotor Torque | Ma [Nm] | 247 | No Load Current | [A] | 11,4 |
| | Ma / Mn | 3,42 | No Load Power | [W] | 531 |

MECHANICAL DATA

| | | | |
|---------------|----------------|--------------------------------|-----------|
| DE Bearing | 6208-ZZ | Sound Pressure - 50 Hz - dB[B] | 83 |
| NDE Bearing | 6208-ZZ | Sound Pressure - 60 Hz - dB[B] | 86 |
| Fixed Bearing | NO | Housing Material | Aluminium |
| Lubrication | - | DE Shield Material | Aluminium |
| Grease Amount | - | Terminal Box Material | Polyamide |
| Grease Type | - | Cable Entry | PG 21 |
| Feather Key | 10*8*70 | Cable Gland Position | 4 |
| Balance | G 1,6 Half Key | | |

MECHANICAL DIMENSIONS


| A | AA | AB | AC | AD | B | B' | BA | BB | C | D | d | E | EB | F | GA |
|-----|------|------|-------|-------|------|----|------|-------|-------|-----|-----|-----|------|----|----|
| 216 | 58,5 | 37,4 | 258,5 | - | 178 | - | 37,4 | 218,3 | 89 | 38 | M12 | 80 | 70 | 10 | 41 |
| GD | H | HA | HC | HD | K | K1 | L | LA | LB | M | N | P | S | S1 | T |
| 8 | 132 | 16 | 262,6 | 316,6 | 28,2 | 12 | 579 | 17,5 | 561,5 | 265 | 230 | 300 | 14,5 | 4 | 4 |



Three Phase Induction Motor - Squirrel Cage




GENERAL INFORMATION

| | | | |
|--------------------|---------------|------------------------|--------|
| Type | D2EA180M4AB35 | Efficiency Class | IE2 |
| Pout [kW] | 18,5 | Vibration Class | A |
| Speed [rpm] | 1470 | Weight [kg] | 142 |
| Frame | 180M | Degree of Protection | IP55 |
| Current [A] | 34,5 | Cooling Method | IC 411 |
| cos φ | 0,83 | Insulation Class | F |
| Rotation | CW-CCW | Temperature Class | B |
| Duty | S1 | Construction | IM B35 |
| Ambient Temp. [°C] | -20...+40 | Altitude above sea [m] | 1000 |



USE WITH VARIABLE SPEED DRIVE

ONLY ACC. EU REGULATION 640/2009

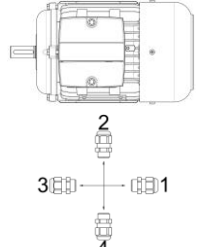
| | | | | | | | |
|-------|--------|------------|----------|-------|------------|------|------|
| 3~MOT | Type | D2EA180M4A | | | | η% | |
| S1 | IM B35 | IP 55 | I.C.L.F. | | IE2 - 91,2 | | |
| V | Hz | A | kW | cos φ | 1 / min | LOAD | EFF. |
| Δ 400 | 50 | 34,5 | 18,5 | 0,83 | 1470 | %75 | 90,5 |
| Δ 480 | 60 | 34,5 | 22,2 | 0,82 | 1764 | %50 | 89,8 |

ELECTRICAL DATA

| V1 | %Load | T [Nm] | I [A] | rpm | P2 [W] | cos φ | Efficiency | Hz |
|-----|-------|--------|-------|------|--------|-------|------------|----|
| 400 | 100 | 121,7 | 34,6 | 1459 | 18496 | 0,85 | 90,8 | 50 |
| 400 | 75 | 90,52 | 26,6 | 1472 | 13954 | 0,8 | 94,2 | 50 |
| 400 | 50 | 60,06 | 20,4 | 1484 | 9335 | 0,72 | 91,4 | 50 |

| | | | | | |
|----------------------|---------|------|------------------|---------|------|
| Locked Rotor Current | Ia [A] | 211 | Breakdown Torque | Mk [Nm] | 317 |
| | Ia / In | 6,12 | | Mk / Mn | 2,60 |
| Locked Rotor Torque | Ma [Nm] | 281 | No Load Current | [A] | 13,4 |
| | Ma / Mn | 2,31 | No Load Power | [W] | 646 |

MECHANICAL DATA

| | | | | |
|---------------|----------------|--------------------------------|-----------|--|
| DE Bearing | 6310-ZZ | Sound Pressure - 50 Hz - dB[B] | 89 | Cable Gland Position  |
| NDE Bearing | 6210-ZZ | Sound Pressure - 60 Hz - dB[B] | 92 | |
| Fixed Bearing | YES | Housing Material | Aluminium | |
| Lubrication | - | DE Shield Material | Cast Iron | |
| Grease Amount | - | Terminal Box Material | Aluminium | |
| Grease Type | - | Cable Entry | M32 | |
| Feather Key | 14*9*100 | Cable Gland Position | 4 | |
| Balance | G 2,5 Half Key | | | |

MECHANICAL DIMENSIONS

| A | AA | AB | AC | AD | B | B' | BA | BB | C | D | d | E | F | FA | GA |
|-----|------|-----|----|-----|-----|------|-----|------|-----|-----|-----|-----|------|-----|------|
| 279 | 73,5 | 344 | - | - | 241 | - | 42 | 291 | - | 48 | M16 | 110 | 14 | 100 | 51,5 |
| GD | H | HA | HC | HD | K | K1 | L | LA | LB | M | N | P | S | S1 | T |
| 9 | 180 | 25 | - | 436 | 41 | 14,5 | 708 | 18,5 | 595 | 300 | 250 | 350 | 18,5 | - | 5 |

