# Technical data

**Pump name** CMD 2.00 T

| | | |
|---|---|---|
| Customer | Date 23-June-2020 | Company |
| Contact | Item no. | Issued by |
| Phone | Project | Phone |
| E-mail | Project ID | E-mail |

**Requested data**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Pump type | CENTRIFUGAL PUMPS | Fluid | | Water, clean |
| 2 | Number of pumps / Reserve | 1 / 0 | Liquid temperature | K | 293 |
| 3 | Flow m³/h | 0 | Kin. viscosity | mm²/s | 1 |
| 4 | Head m | 0 | Vapour pressure | kPa | 2.2 |
| 5 | Geodetic head m | 0 | PH value | | 7 |
| 6 | Inlet pressure (pin) kPa | 10 | Density | kg/m³ | 1000 |
| 7 | Available system NPSH | 0 | Solids | Weight % | 0 |
| 8 | Ambient temperature K | 290 | | | |

**Pump**

| | | | | | | |
|---|---|---|---|---|---|---|
| 9 | Pump name | CMD 2.00 T | Frequency | | Hz | 50 |
| 10 | Design | CENTRIFUGAL PUMPS | Installation type | | | STANDARD |
| 11 | Manufacturer | EPE | Impeller Diameter | Max. | mm | 110 |
| 12 | Speed 1/min | 2850 | | Designed | mm | 110 |
| 13 | No. of Stage | 1 | | Min. | mm | 110 |
| 14 | Connection Suction side | UNI ISO 228 | Flow | Operating | m³/h | |
| 15 | Connection Discharge side | UNI ISO 228 | | Max- | m³/h | 57 |
| 16 | Max Working Pressure kPa | 600 | | Min- | m³/h | 18 |
| 17 | Shut-off head kPa | 129.28 | Head | Operating | m | |
| 18 | Total weight kg | See the table of "Dimensions". | | - (Qmax.) | m | 8.4 |
| 19 | Shaft power kW | | | - (Qmin.) | m | 13.1 |
| 20 | | | Max. Shaft Power at max. impeller | | kW | 1.84 |
| 21 | Required pump NPSH m | | Efficiency | | % | |

**Materials**

| | | | | |
|---|---|---|---|---|
| 22 | Impeller | Cast iron | | |
| 23 | Casing | Cast iron | | |
| 24 | Shaft | AISI 303 (wet extension | | |
| 25 | | | | |
| 26 | | | | |
| 27 | | | | |

**Motor**

| | | | | | |
|---|---|---|---|---|---|
| 28 | Manufacturer | EPE Standard | Insulation class | | F |
| 29 | Type | TEFC_CMD 2.00 T_230_Three Phase | Phases | | 3~ |
| 30 | Specific design | IE3 / 50 Hz / Pole pairs 1 | Frame size | | |
| 31 | Rated power kW | 1.5 | Weight | kg | 0 |
| 32 | Number of poles | 2 | Electric voltage | V | 230 |
| 33 | Speed 1/min | 2800 | Electric current | A | 7.1 |
| 34 | Degree of protection | IP 44 | | | |
| 35 | | | | | |

**Remarks**

EBARA

# Performance curve **Pump name** CMD 2.00 T

| | | |
|---|---|---|
| Customer | Date 23-June-2020 | Company |
| Contact | Item no. | Issued by |
| Phone | Project | Phone |
| E-mail | Project ID | E-mail |

**Requested data**

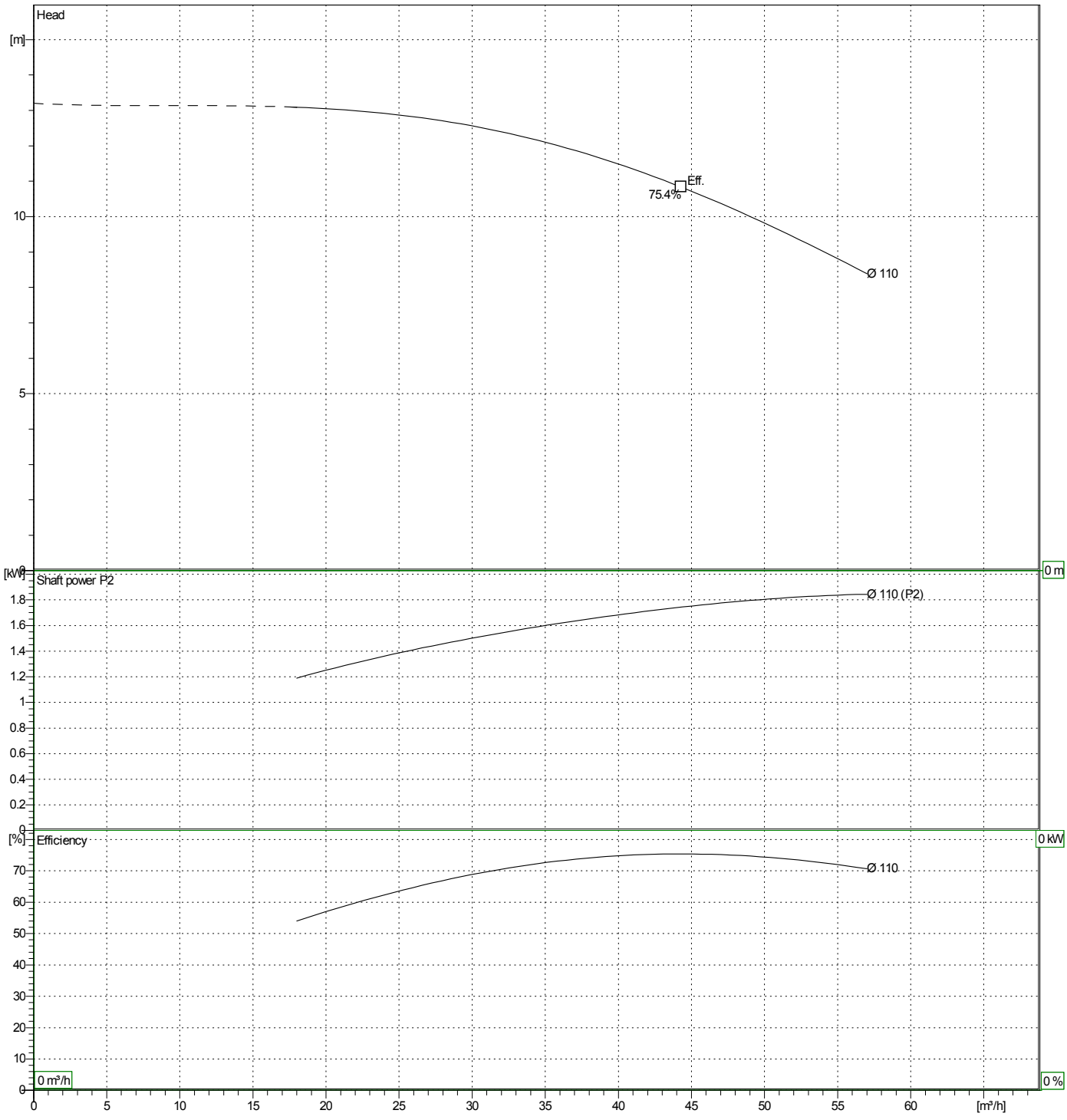
| | | | |
|---|---|---|---|
| 1 | Flow | m³/h | 0 |
| 2 | Head | m | 0 |
| 3 | Geodetic head | m | 0 |

**Pump**

| | | | | | |
|---|---|---|---|---|---|
| Operating Flow | m³/h | | Frequency | Hz | 50 |
| Operating Head | m | | Number of poles | | 2 |
| Impeller Diameter | Designed mm | 110 | Speed | 1/min | |

Test standard: ISO 9906:2012 - Grade3B

Water, clean [100%] ; 293K; 998.3kg/m³; 1mm²/s

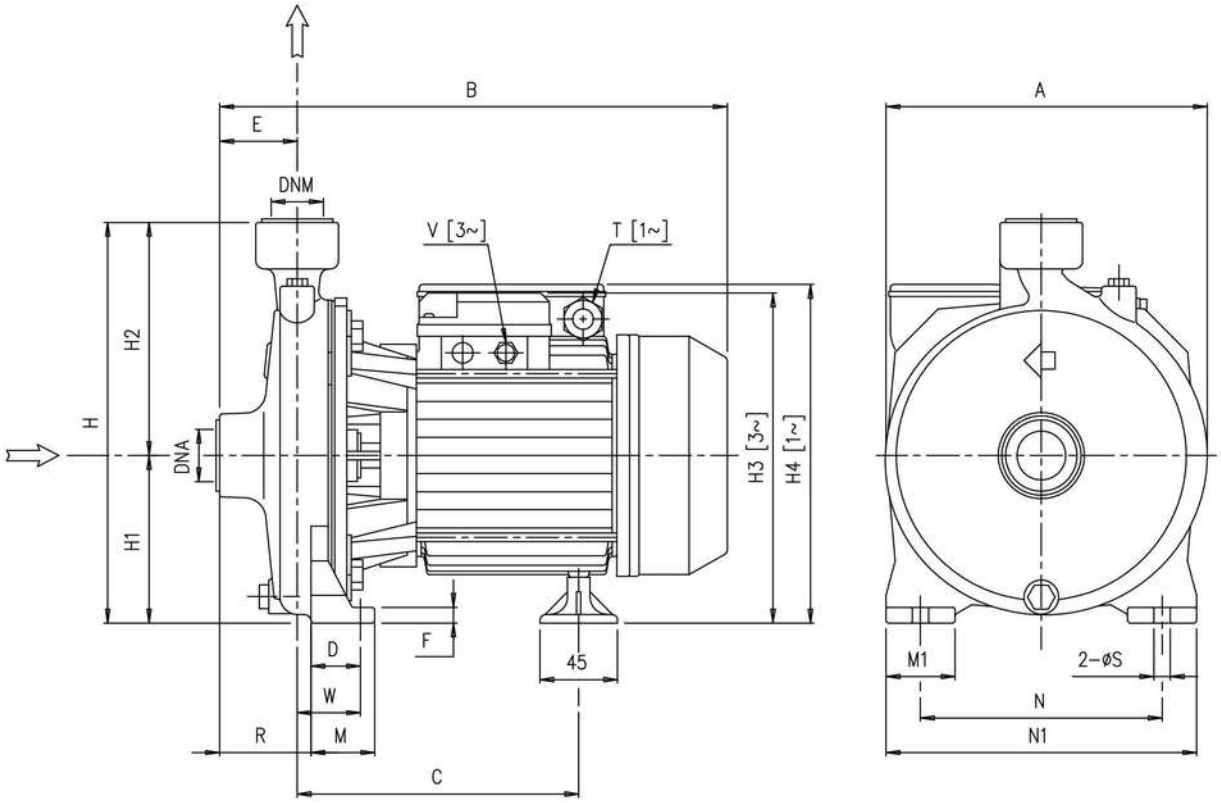



EBARA

# Dimensions

**Pump name** CMD 2.00 T

| | | |
|---|---|---|
| Customer | Date 23-June-2020 | Company |
| Contact | Item no. | Issued by |
| Phone | Project | Phone |
| E-mail | Project ID | E-mail |




[1~] Single phase
[3~] Three phase

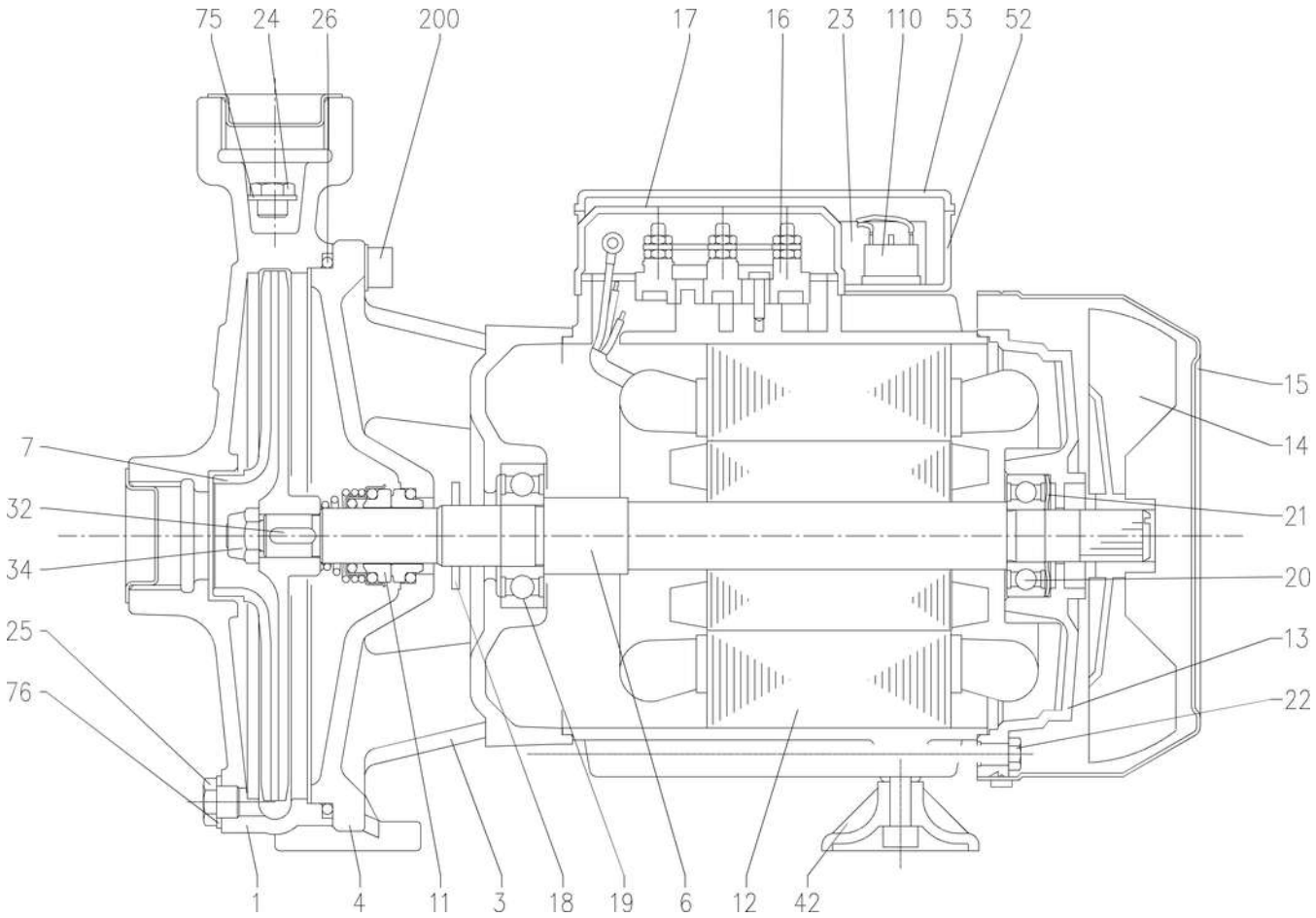
| Dimensions in mm | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | A | 213 | M1 | 40 | | | | |
| 2 | B | 410.5 | N | 160 | | | | |
| 3 | C | 222.8 | N1 | 200 | | | | |
| 4 | D | 36.8 | R | 100.5 | | | | |
| 5 | DNA | G 2 1/2 | S | 9.5 | | | | |
| 6 | DNM | G 2 1/2 | V | M20X1.5 | | | | |
| 7 | E | 68 | W | 69.3 | | | | |
| 8 | F | 12 | Weight P&M | 24.2 kg | | | | |
| 9 | H | 271.5 | | | | | | |
| 10 | H1 | 111.5 | | | | | | |
| 11 | H2 | 160 | | | | | | |
| 12 | H3 | 225.5 | | | | | | |
| 13 | M | 45 | | | | | | |

EBARA

# (1/3)
# Construction

**Pump name** CMD 2.00 T

| | | |
|---|---|---|
| Customer | Date 23-June-2020 | Company |
| Contact | Item no. | Issued by |
| Phone | Project | Phone |
| E-mail | Project ID | E-mail |



# (2/3)
# Construction

**Pump name** CMD 2.00 T

| | | |
|---|---|---|
| Customer | Date 23-June-2020 | Company |
| Contact | Item no. | Issued by |
| Phone | Project | Phone |
| E-mail | Project ID | E-mail |

| N° | PART NAME | | MATERIAL | DIMENSIONS | STANDARD | Q.TY |
|---|---|---|---|---|---|---|
| 1 | Casing | | Cast iron | | | 1 |
| 3 | Motor bracket | | Cast iron | | | 1 |
| 4 | Casing cover | | AISI 304 | | | 1 |
| 6 | Shaft with rotor | | [1] | | | 1 |
| 7 | Impeller | | [2] | | | 1 |
| 11 | Mechanical seal | [5] | Carbon/Ceramic/NBR | | | 1 |
| 12 | Motor frame with stator | | - | | | 1 |
| 13 | Motor cover | | Aluminium | | | 1 |
| 14 | Fan | | PA | | | 1 |
| 15 | Fan cover | | Fe P04 Galvanized | | | 1 |
| 16 | Terminal board | | - | | | 1 |
| 17 | Terminal box cover | [3] | Aluminium | | | 1 |
| 18 | Splash ring | | NBR | D35x19.5x2.5 | EBARA DRAWING | 1 |
| 19 | Pump side ball bearing | | - | | | 1 |
| 20 | Fan side ball bearing | | - | | | 1 |
| 21 | Adjusting ring | | Steel C70 | | | 1 |
| 22 | Tie rod | | Fe 42 Galvanized | | | 4 |
| 23 | Capacitor | [4] | - | | | 1 |
| 24 | Priming plug | CMD 1.50; 2.00; 3.00; 4.00 | Brass | G 1/4" | UNI 338 | 1 |
| | | other models | | G 1/8" | | |
| 25 | Drain plug | CMD 1.50; 2.00; 3.00; 4.00 | Brass | G 1/4" | UNI 338 | 1 |
| | | other models | | G 1/8" | | |
| 26 | O-ring | | NBR | | | 1 |
| 32 | Key | | AISI 316 | | | 1 |
| 34 | Impeller nut | other models | AISI 304 | M10 | UNI 7474 | 1 |
| | | CMB 4.00; 5.50 | | M12x1.25 | | 1 |
| 42 | Foot | | PP | | | 1 |
| 52 | Capacitor box | [4] | ABS class V-0 | | | 1 |
| 53 | Capacitor box cover | [4] | ABS class V-0 | | | 1 |
| 75 | Washer | CMD 1.50; 2.00; 3.00; 4.00 | Aluminium | 13.5x19x1.5 | | 1 |
| | | other models | | 10x16x1.5 | | 1 |
| 76 | Washer | CMD 1.50; 2.00; 3.00; 4.00 | Aluminium | 13.5x19x1.5 | | 1 |
| | | other models | | 10x16x1.5 | | 1 |
| 110 | Protector | [4] | - | | | 1 |
| 200 | Screw | CMD 1.50; 2.00; 3.00; 4.00 | Zn Steel Cl. 8.8 | M8x25 | ISO 898-1 | 4 |
| | | CMB 1.50; 2.00; 3.00 | | M8x22 | | |
| | | CMA 1.50 | | M10x35 | | |

[1] Material: AISI303 (wet extension) for version CMA, CMB 1.50-2.00-3.00, CMD 1.50-2.00-3.00
AISI304 (wet extension) for version CMB 4.00-5.50, CMD 4.00

[2] Material: Brass for version: CMA, CMB 2.00-3.00-4.00-5.50
Cast iron for version: CMB 1.50, CMD

[3] Only for three phase

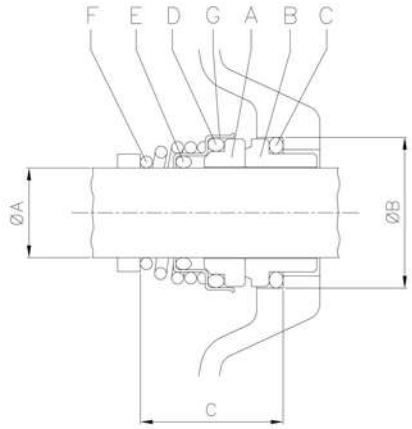
[4] Only for single phase

[5] See **CONSTRUCTION 3**

# (3/3)
# Construction

**Pump name** CMD 2.00 T

| | | |
|---|---|---|
| Customer | Date 23-June-2020 | Company |
| Contact | Item no. | Issued by |
| Phone | Project | Phone |
| E-mail | Project ID | E-mail |




| Pump type | | Dimensions mm | | |
|---|---|---|---|---|
| Single phase | Three phase | Ø A | Ø B | C |
| CMA 1.50 M | CMA 1.50 T | 18 | 30.9 | 32 |
| CMA 2.00 M | CMA 2.00 T | 18 | 30.9 | 32 |
| - | CMA 3.00 T | 18 | 30.9 | 32 |
| CMB 1.50 M | CMB 1.50 T | 18 | 30.9 | 32 |
| CMB 2.00 M | CMB 2.00 T | 18 | 30.9 | 32 |
| - | CMB 3.00 T | 18 | 30.9 | 32 |
| CMD 1.50 M | CMD 1.50 T | 18 | 30.9 | 32 |
| CMD 2.00 M | CMD 2.00 T | 18 | 30.9 | 32 |
| - | CMD 3.00 T | 18 | 30.9 | 32 |
| - | CMD 4.00 T | 18 | 30.9 | 32 |

| REF | PART NAME | MATERIAL product standard |
|---|---|---|
| A | Rotary seal ring | ceramic |
| B | Stationary seal ring | carbon graphite |
| C | O Ring | NBR |
| D | O Ring | NBR |
| E | O Ring | NBR |
| F | Self driving spring | AISI 316 |
| G | Frame | AISI 304 |