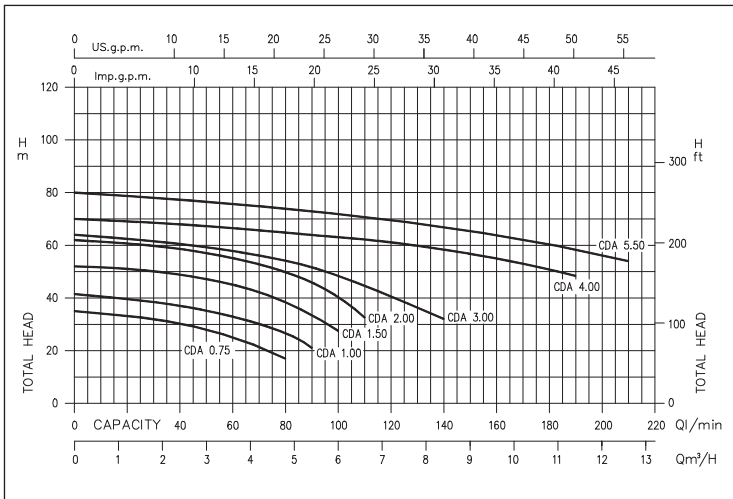


DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

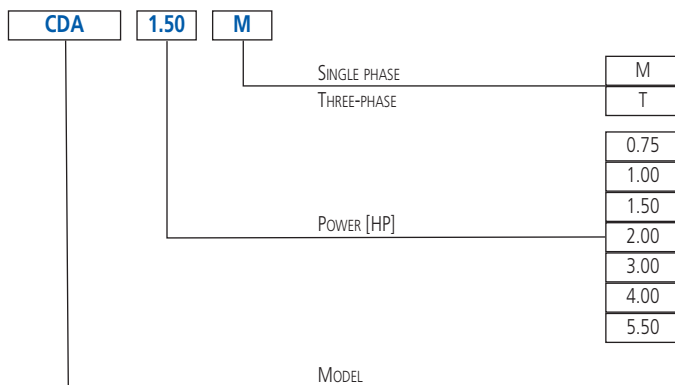
in cast iron



PERFORMANCE CURVES (according to ISO 9906 Attachment A)



IDENTIFICATION CODE



Cast iron dual impeller centrifugal electric pumps.

APPLICATIONS

- Pressure boosting domestic plants
- Small-sale irrigation
- Moving non-aggressive liquids for civil and industrial use
- Washing plants
- Washing vehicles

TECHNICAL DETAILS

- Available with brass impeller (CDA 0.75 M GO, CDA 1.00 M GO, CDA 1.00 T GO)
- They can be inserted into machinery for industrial use

TECHNICAL DATA

- Maximum working pressure 6 bar for CDA 0.75 - 1.00, 10 bar for the rest of the range
- Maximum temperature of the liquid 40°C for CDA 0.75 - 1.00, 90°C for the rest of the range
- Self-ventilated 2 pole asynchronous motor
- Class of insulation F
- IP44 Protection rating
- 230V ± 10%, 50Hz single phase voltage
- 230/400V ±10% 50Hz three phase voltage
- Permanent capacitor inserted and thermo-amperometric protection with automatic rearm incorporated for the single phase motor
- Protection under user's responsibility for the three phase version
- G1 suction connection for CDA 0.75 - 1.00, G1¼ for CDA 1.50 - 2.00 - 3.00, G1½ per CDA 4.00 - 5.50
- G1 discharge connection for CDA 0.75 - 1.00 - 1.50 - 2.00 - 3.00, G1¼ for CDA 4.00 - 5.50

MATERIALS

- Cast iron pump body
- Mechanical sealing in Carbon/Ceramic/NBR
- Impeller in technopolymer for CDA 0.75 - 1.00, in brass for the rest of the range
- Shaft in AISI 303 for CDA 1.50 - 2.00 - 3.00, in AISI 304 for CDA 4.00 - 5.50, in AISI 420 for CDA 0.75 - 1.00
- Support in aluminium for CDA 0.75 - 1.00, in cast iron for the rest of the range
- Seal housing disc in AISI 304 for CDA 0.75 - 1.00, in cast iron for the rest of the range

CONTROL PANELS

- 1EPBH (see page 207)

ACCESSORI

- 5 litre 10 bar ¾ EPDM vessel
- 24 litre 8 bar 1" EPDM vessel
- 24 litre 10 bar 1" EPDM vessel
- PVC 5m key float with counter-weight
- PVC 10m key float with counter-weight
- SQUARE-D FSG-2 1.4÷4.6 bar G¼ F pressure switch
- FYG-22 2.8÷7 bar G¼ F pressure switch
- Presscomfort - Pressure regulator (see page 208)
- Press•o•Matic - Variable speed control system (single phase 230V±10% - power supply three phase 220V output - maximum motor power 2.2 kW - 3 HP - see page 209)

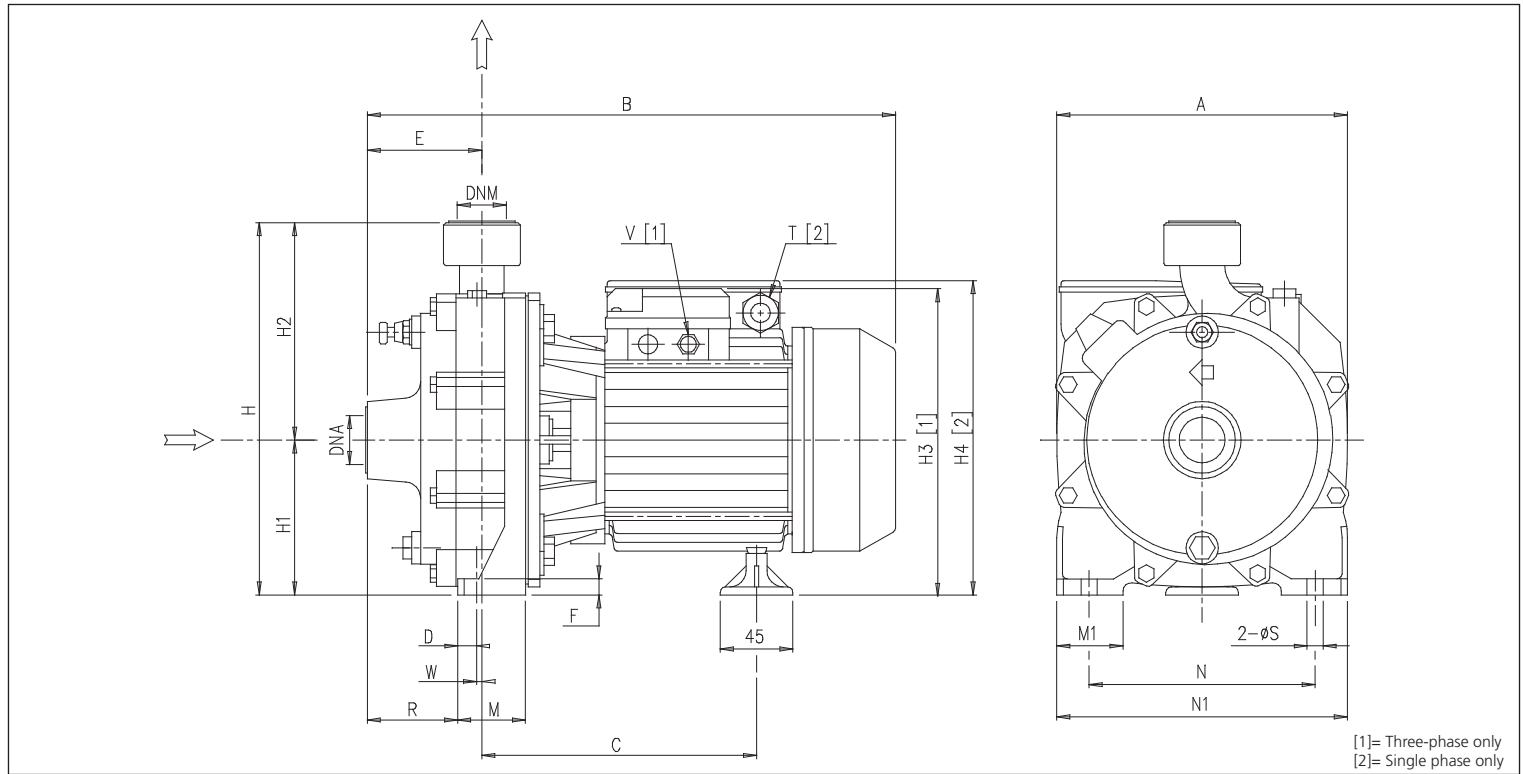
DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

PERFORMANCE TABLE

| Model | | P ₂ | | Q=Flow rate | | | | | | | | | | | | | | | | | | | |
|----------------------|-------------------------|----------------|------|----------------------------|-----------|-----------|---------|-----------|-----------|----------|------------|------------|-------------|-------------|-------------|---|---|---|---|---|---|---|---|
| 230V single phase | 230/400V three-phase | [HP] | [kW] | H=Head [m] | | | | | | | | | | | | | | | | | | | |
| | | | | l/min m ³ /h | 20 1,2 | 40 2,4 | 50 3 | 80 4,8 | 90 5,4 | 100 6 | 110 6,6 | 140 8,4 | 170 10,2 | 190 11,4 | 210 12,6 | | | | | | | | |
| CDA 0.75 M | CDA 0.75 T | 0,75 | 0,55 | 33,0 | 30,2 | 27,9 | 17,0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| CDA 1.00 M | CDA 1.00 T | 1 | 0,75 | 39,5 | 37,0 | 35,2 | 27,0 | 21,0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| CDA 1.50 M | CDA 1.50 T | 1,5 | 1,1 | 50,8 | 48,8 | 47,1 | 38,4 | 33,4 | 27,5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| CDA 2.00 M | CDA 2.00 T | 2 | 1,5 | 60,5 | 58,6 | 56,9 | 49,8 | 46,5 | 40,3 | 32,5 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | CDA 3.00 T | 3 | 2,2 | - | 60,5 | 59,3 | 54,1 | 51,6 | 48,4 | 44,6 | 32,0 | - | - | - | - | - | - | - | - | - | - | - | - |
| - | CDA 4.00 T | 4 | 3 | - | - | 67,0 | 64,8 | 63,9 | 62,5 | 62,0 | 58,0 | 53,5 | 48,0 | - | - | - | - | - | - | - | - | - | - |
| - | CDA 5.50 T | 5,5 | 4 | - | - | 76,5 | 73,9 | 72,9 | 71,8 | 70,5 | 66,8 | 62,0 | 58,3 | 54,0 | - | - | - | - | - | - | - | - | - |

DIMENSIONS



DIMENSIONS TABLE

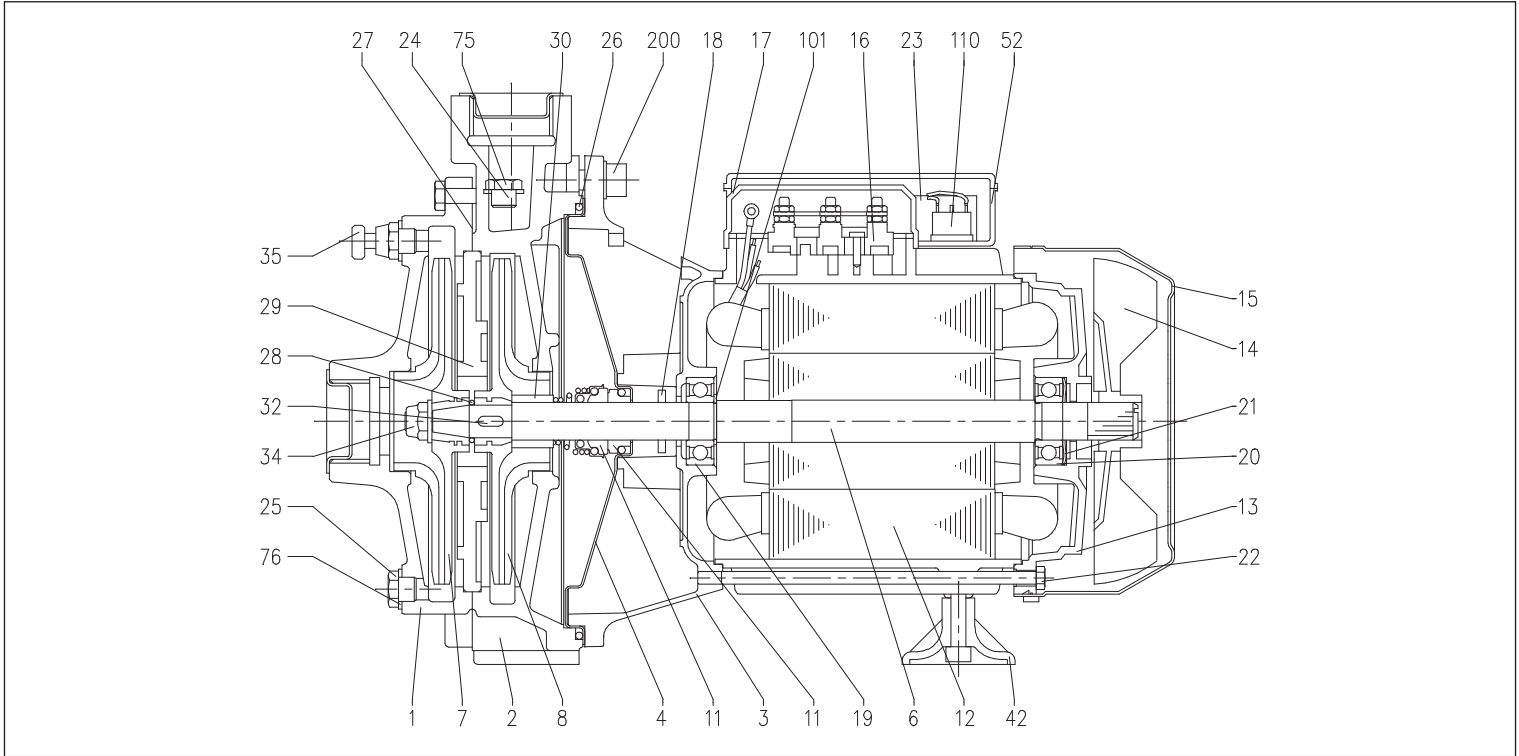
| Model | Dimensions [mm] | | | | | | | | | | | | | | | | | | | Weight [kg] | | | |
|-----------|-----------------|-------|-------|-----|------|----|-------|-------|-----|-----------|-----------|----|----|-----|-----|------|----------|----------|------|-------------|-------|-------|------|
| | A | B | C | D | E | F | H | H1 | H2 | [1] H3 | [2] H4 | M | M1 | N | N1 | R | [2] T | [1] V | W | | S | DNA | DNM |
| CDA 0.75M | 183 | 336,3 | 179,8 | 8,3 | 73 | 9 | 227 | 97 | 130 | - | 198 | 42 | 40 | 140 | 180 | 57,5 | PG11 | - | 6,8 | 9,5 | G 1 | G 1 | 13,5 |
| CDA 0.75T | 183 | 336,3 | 179,8 | 8,3 | 73 | 9 | 227 | 97 | 130 | 197,5 | - | 42 | 40 | 140 | 180 | 57,5 | - | PG11 | 6,8 | 9,5 | G 1 | G 1 | 13,5 |
| CDA 1.00M | 183 | 336,3 | 179,8 | 8,3 | 73 | 9 | 227 | 97 | 130 | - | 198 | 42 | 40 | 140 | 180 | 57,5 | PG11 | - | 6,8 | 9,5 | G 1 | G 1 | 15,0 |
| CDA 1.00T | 183 | 336,3 | 179,8 | 8,3 | 73 | 9 | 227 | 97 | 130 | 197,5 | - | 42 | 40 | 140 | 180 | 57,5 | - | PG11 | 6,8 | 9,5 | G 1 | G 1 | 15,0 |
| CDA 1.50M | 209 | 394,8 | 218,3 | 8,3 | 86 | 9 | 265 | 110 | 155 | - | 242 | 48 | 40 | 155 | 195 | 65,5 | PG13,5 | - | 12,3 | 9,5 | G 1 ¼ | G 1 | 25,0 |
| CDA 1.50T | 194 | 394,8 | 218,3 | 8,3 | 86 | 9 | 265 | 110 | 155 | 224 | - | 48 | 40 | 155 | 195 | 65,5 | - | PG11 | 12,3 | 9,5 | G 1 ¼ | G 1 | 25,0 |
| CDA 2.00M | 209 | 410,8 | 218,3 | 8,3 | 86 | 9 | 265 | 110 | 155 | - | 242 | 48 | 40 | 155 | 195 | 65,5 | PG13,5 | - | 12,3 | 9,5 | G 1 ¼ | G 1 | 27,0 |
| CDA 2.00T | 194 | 394,8 | 218,3 | 8,3 | 86 | 9 | 265 | 110 | 155 | 224 | - | 48 | 40 | 155 | 195 | 65,5 | - | PG11 | 12,3 | 9,5 | G 1 ¼ | G 1 | 27,0 |
| CDA 3.00T | 194 | 410,8 | 218,3 | 8,3 | 86 | 9 | 265 | 110 | 155 | 224 | - | 48 | 40 | 155 | 195 | 65,5 | - | PG11 | 12,3 | 9,5 | G 1 ¼ | G 1 | 27,0 |
| CDA 4.00T | 228 | 467,3 | 225,3 | 12 | 95,5 | 12 | 308,5 | 133,5 | 175 | 264,5 | - | 57 | 50 | 180 | 230 | 71,5 | - | G 1 ½ | 12,0 | 12 | G 1 ½ | G 1 ¼ | 42,5 |
| CDA 5.50T | 228 | 467,3 | 225,3 | 12 | 95,5 | 12 | 308,5 | 133,5 | 175 | 264,5 | - | 57 | 50 | 180 | 230 | 71,5 | - | G 1 ½ | 12,0 | 12 | G 1 ½ | G 1 ¼ | 46,3 |

[1]= Three-phase only
[2]= Single phase only

DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

SECTIONAL VIEW



MATERIALS TABLE

| Ref. | Name | Material | Ref. | Name | Material |
|------|------------------------|--------------------|------|--------------------------|----------------------------|
| 1 | Pump body | Cast iron | 23 | Capacitor [2] | - |
| 2 | Pump body | Cast iron | 24 | Filler cap | Brass |
| 3 | Motor support | see page 24 | 25 | Drain plug | Brass |
| 4 | Seal housing disc | see page 24 | 26 | O-Ring | NBR |
| 6 | Shaft | see page 24 | 27 | Pump body gasket | Cellulose fibres |
| 7 | Impeller | see page 24 | 28 | O-Ring | NBR |
| 8 | Impeller | see page 24 | 29 | Intermediate disc | Cast iron |
| 11 | Mechanical sealing | Carbon/Ceramic/NBR | 30 | Seal spacer | Brass |
| 12 | Motor case | - | 32 | Key | AISI 304 |
| 13 | Motor cover | Aluminium | 34 | Impeller nut [3] | AISI 304 |
| 14 | Fan | Polypropylene | 35 | Bleed valve | - |
| 15 | Fan cover | Galvanised Fe P04 | 42 | Foot | PVC |
| 16 | Terminal box | - | 52 | Capacitor-holder box [2] | Polypropylene |
| 17 | Terminal box cover [1] | Aluminium | 75 | Washer | Aluminium |
| 18 | Spray protector ring | NBR | 76 | Washer | Aluminium |
| 19 | Bearing (pump side) | - | 101 | Seeger ring | AISI 420 |
| 20 | Bearing (motor side) | - | 110 | Motorprotector [4] | - |
| 21 | Adjusting ring | Steel C70 | 200 | Screw (pump body) | A2 UNI7323 stainless steel |
| 22 | Tie-rod | Galvanised Fe 42 | | | |

[1]= For three-phase only

[2]= For single phase only

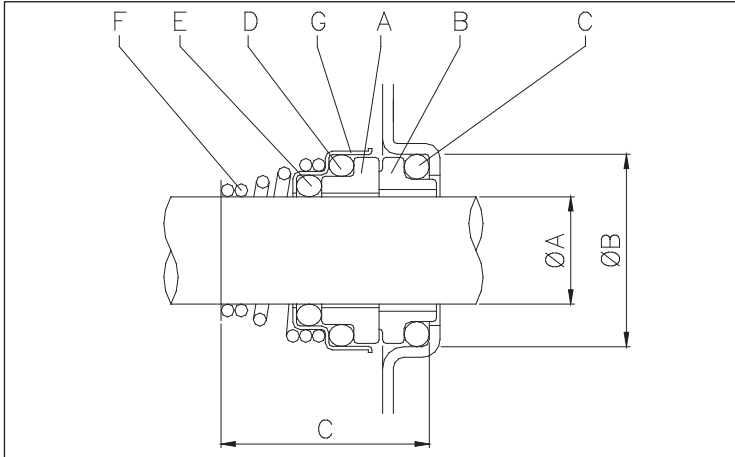
[3]= For the version with brass impeller only

[4]= For single phase CDA 1.50 - 2.00 versions only

DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

MECHANICAL SEAL



MATERIALS TABLE

| Ref. | Name | Material |
|------|-----------------|----------|
| A | Rotating part | Ceramic |
| B | Fixed part | Carbon |
| C | O-Ring | NBR |
| D | O-Ring | NBR |
| E | O-Ring | NBR |
| F | Spring | AISI 316 |
| G | Structure/frame | AISI 304 |

DIMENSIONS

| Single phase | Three phase | ØA | ØB | C |
|--------------|-------------|----|------|----|
| CDA 0.75 M | CDA 0.75 T | 15 | 26 | 29 |
| CDA 1.00 M | CDA 1.00 T | 15 | 26 | 29 |
| CDA 1.50 M | CDA 1.50 T | 18 | 30,9 | 32 |
| CDA 2.00 M | CDA 2.00 T | 18 | 30,9 | 32 |
| - | CDA 3.00 T | 18 | 30,9 | 32 |
| - | CDA 4.00 T | 20 | 30,9 | 33 |
| - | CDA 5.50 T | 20 | 30,9 | 33 |

ELECTRIC DATA TABLE

| Model | | P ₂ | | Single phase Capacitor | | P ₁ | | Absorbed Current [A] | | |
|-------------------|----------------------|----------------|------|------------------------|----------------|-------------------|------------------|----------------------|-----------------------|-----|
| 230V single phase | 230/400V three-phase | [HP] | [kW] | µF | V _c | Single phase [kW] | Three phase [kW] | Single phase 230V | Three phase 230V 400V | |
| CDA 0.75 M | CDA 0.75 T | 0,75 | 0,55 | 16 | 450 | 1,1 | 1,05 | 5,0 | 3,4 | 2,0 |
| CDA 1.00 M | CDA 1.00 T | 1 | 0,75 | 20 | 450 | 1,38 | 1,18 | 6,1 | 4,0 | 2,3 |
| CDA 1.50 M | CDA 1.50 T | 1,5 | 1,1 | 35 | 450 | 1,85 | 1,8 | 8,6 | 5,6 | 3,3 |
| CDA 2.00 M | CDA 2.00 T | 2 | 1,5 | 40 | 450 | 2,35 | 2,25 | 10,8 | 7,2 | 4,1 |
| - | CDA 3.00 T | 3 | 2,2 | - | - | - | 2,8 | - | 8,8 | 5,1 |
| - | CDA 4.00 T | 4 | 3 | - | - | - | 4,2 | - | 13,0 | 7,5 |
| - | CDA 5.50 T | 5,5 | 4 | - | - | - | 5,05 | - | 16,5 | 9,5 |