

1KVT

DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS





TECHNICAL DATA

Operating range: 4 to 300 m²/h

Pumped liquid: clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water.

Pumped liquid temperature range: from 0 to 40 °C.

Maximum ambient temperature: $+40^{\circ}$ C

Maximum operating pressure: 16 bar (1600kPa) PN16

Special executions on request:

diesel version with water/water heat exchanger, 230 three-phase 50 or

60 Hz electric versions, non standard performance.

APPLICATIONS

The new 1KVT fire-fighting pump sets with diesel engine or electric motor assembly, ideal for automatic sprinkler systems and/or hydrants of commercial buildings, are manufactured using vertical turbine pumps, in accordance with article 10.6.1 of UNI EN 12845 standards.

- Simple Maintenance: Thanks to the submersible pump body and the motor assembly control above the surface, they eliminate any self-priming issues, in addition to making the job of the maintenance technician much easier.
- Modular design: DAB pressurisation sets are designed to be coupled with each other, in order to obtain all the versions and meet all the requirements of the UNI EN 12845 standard.

Available set models:

- 1 KVT EN, consisting of an axial flow submersible pump (vertical turbine pump) with electric motor, including submersible pump, cork plug, control head installed on appropriate base, electric control panel.
- 1 KVT MD EN consisting of an axial flow submersible pump (vertical turbine pump) with air or radiator cooled diesel engine (exchanger on request), including submersible pump, cork plug, control head installed on appropriate base, electric control panel, diesel tank ensuring 6 hours of operation, with fuel collection tank for powers up to 26 kW

Jockey pump and axis lines supplied as separate accessories.

CONSTRUCTION FEATURES OF THE UNI EN 12845 FIRE-FIGHTING PUMP SET

The 1KVT range includes sets with axial flow vertical submersible pumps (for powers up to 75 kW), treated with black cataphoresis paint coating, which ensures extremely high resistance to corrosion. The control heads, base, frame, hydraulic column and manifolds are painted RAL3000 red. The set is pre-assembled on a RAL3000 red painted steel base supporting the control head, the motor or engine, and the electric control panel. The control head is coupled by means of a spacer elastic coupling to an electric motor or diesel engine capable of providing the power absorbed by the pump at any pump load condition, from no-load, to a load equal to NPSH16m (as requested by section 10.1 of the UNI EN 12845 standard).

The UNI EN 12845 DAB fire-fighting sets are supplied in modular version. This setup facilitates transport, and the installation of DAB fire-fighting pump sets in pump rooms, even with narrow access doors. Thanks to a coupling kit (supplied as accessory), it is possible to obtain all the compositions contemplated by the standard (one, two, or three electric or Diesel pumps, with or without jockey pump). Each module has a serial number with its own declaration of conformity, and its own installation and maintenance manual.

Specific characteristics of the Diesel engine-driven pump

Diesel engine-driven pump sets have a vibration dampening system that reduces the amount of the vibrations produced by the Diesel engine reaching the system. This consists of rubber anti-vibration feet and couplings. Each Diesel engine-driven pump includes two start-up batteries and a Diesel tank providing 6 hours of continuous operation. A diesel collection tank is included for powers up to 26 kW, to contain any fuel spillages. The Diesel engine has an air/air cooling system for low powers (up to 26 kW), and air/water cooling system for higher powers (37 kW and over). The Diesel engine can operate continuously at full load in accordance with ISO 3046 standards, curve NA (section 10.9.1 of UNI EN 12845).

Engine-driven pumps with water/water heat exchanger cooling system are also available on request, for powers starting from 37 kW.

Main characteristics

- Axial flow vertical submersible pump (vertical turbine), with cork plug, to be coupled with an electric motor or diesel engine through a control head installed on appropriate base.
- Electric motor or diesel engine capable of providing the power used by the pump at a 16 metre NPSH value.

Each diesel engine driven pump has a diesel tank that guarantees 6 hours of operation. For engine powers up to 26 kW, a collection tank is also included (in compliance with UNI 11292), for the containment of any fuel spillages.

- Axis line. This is a separate accessory, which must be installed between the vertical submersible pump and the control head above the surface. The price list includes 6 standard lengths for each axis line (0.5 0.75 1.0 1.5 2.0 2.5 3.05 m), with other lengths available on request.
- The DIVER or JET series jockey pump is a separate accessory supplied complete with 20 I expansion vessel, and its own electric control panel. Delivery column, sized to limit the maximum speed in accordance with UNI EN 12845 13.2.3
- Inspectable non-return valve and shut-off valve before the delivery manifold.
- The diesel engine driven pump version includes engine speed detection by a pick-up sensor



ELECTRIC PUMP CONTROL PANEL

UNI EN 12845 FIRE-FIGHTING PUMP SETS



TECHNICAL DATA

Nominal power input voltage: 400V +/- 5%

Phases: 3

Frequency: 50-60Hz

Number of pumps that can be connected: 1

Maximum nominal power of use: from 3 to 110 kW (depending on model).

Maximum nominal current of use: from 10 Amp to 250 Amp. **Ambient temperature operation limits:** from +4 °C to +40 °C.

Relative humidity (without condensation):

50 % at 40 °C MAX (90 % at 20 °C) Max. altitude: 3000 m (asl) Protection class: IP55 Control panel construction:

According to EN60204, EN 60439-1, and UNI EN 12845/10779.

COMPONENTS

The control and protection panel includes the following components

INTERIOR OF CABINET

Connector for the powering of a GSM Modem (230 V, protected by fuse).

Motor protection fuses (aM type); current surge relay-motor protectors are not permitted by the standard.

Auxiliary circuit protection fuses (Gg type).

Direct pump starters (up to 7,5 kW).

Star/triangle starters (11 kW and over).

24 V auxiliary circuit transformers.

Alarm relay with terminal box for remote status control (as required by the UNI EN 12845 standard).

System start-up input connection terminal box.

ON FRONT PANEL

Electric pump control unit with:

Multifunction instrument with display (voltmeter, ammeter, cosfi metre, wattmeter, alarms and status).

Start and stop pushbuttons.

Status and alarm notification lamps.

Alarm/notification lamp test pushbutton.

0 - 1 selector (0 = automatic disabled; <math>1 = automatic on), key removable only for position one (AUTOMATIC ON).

REMOTELY CONTROLLED ALARMS:

Voltage present.

Phase sequence.

Pump start request from the pressure switches.

Pump start request from priming tank.

Pump in operation.

Start failed.

The above alarms can be remotely controlled in the following ways:

With relay wiring to the CSR-1 control panel.

With RS-485 wiring to the CSR-1 control panel.

With GSM Modem in the CSR-1 control panel, for forwarding status and/or alarm signals SMS (optional).

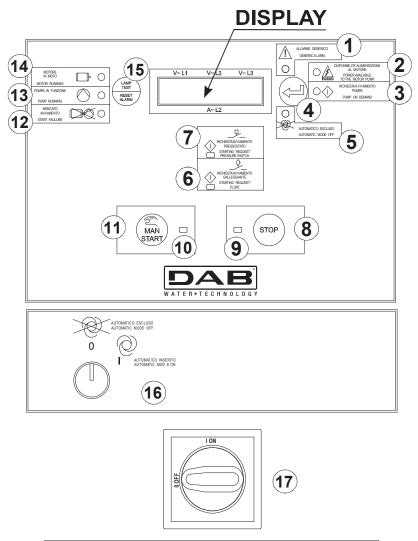


ELECTRIC PUMP CONTROL PANEL

UNI EN 12845 FIRE-FIGHTING PUMP SETS

ELECTRIC PUMP CONTROL UNIT

The A1 electronic control unit supplied with the control panel offers the following features: automatic start from the pressure switches or the priming float switch, manual start, automatic monitoring of pump set faults and incorrect or unavailable power input voltage.



ALIMENTAZIONE DELLA POMPA SPRINKLER
NON SPEGNERE IN CASO DI INCENDIO
SPRINKLER PUMP MOTOR SUPPLY
NOT TO BE SWITCHED OF IN THE EVENT OF FIRE

REF.	FUNCTION
1	LAMP - Generic alarm
2	LAMP - Power input to the motor detected
3	LAMP - Pump START request
4	Press to display the instruments
5	LAMP - Automatic start disabled
6	LAMP - START request from the priming tank float switch
7	LAMP - START request (call) from the pressure switches
8	MANUAL STOP pushbutton
q	LAMP - MANUAL STOP with STOP pushbutton notification

REF.	FUNCTION
10	LAMP - MANUAL START with MAN START pushbutton notification
11	MANUAL START pushbutton
12	LAMP - Start failed
13	LAMP - ELECTRIC PUMP RUNNING with motor running; detected by the electric pump running pressure switch
14	LAMP - MOTOR RUNNING; controlled by the ammeter detection
15	Reset lamp test pushbutton
16	Automatic mode disabling selector
17	Power input disconnection switch



DIESEL PUMP CONTROL PANEL

UNI EN 12845 FIRE-FIGHTING PUMP SETS



TECHNICAL DATA

Nominal power input voltage: 230 V +/- 5%

Phases: 1+N Frequency: 50-60 Hz

Number of pumps that can be connected: 1

Maximum nominal power of use: from 7,5 to 197 kW (Diesel motor power) Nominal power absorbed by the users:

approximately 790 W (3 Amp) at full load, 16 Amp power input line **Ambient temperature operation limits:** from +4 °C to +40 °C

Relative humidity (without condensation):

50 % at 40 °C MAX (90 % at 20 °C) **Max. altitude:** 3000 m (asl) **Protection class:** IP55 **Control panel construction:**

According to EN60204, EN 60439-1, and UNI EN 12845/10779.

DIESEL PUMP CONTROL PANEL

COMPONENTS

The control and protection panel includes the following components

INTERIOR OF CABINET

Connector for the powering of a GSM Modem (12 V, protected by fuse).

Auxiliary circuit protection fuses (Gg type).

2 x 12 V Diesel engine start relays (for 12 V starter motors with powers up to 145 kW).

2 x 24 V Diesel engine start relays (for 24 V starter motors with powers over 145 kW).

2 automatic battery chargers.

Alarm relay with terminal box for remote status control (as required by the UNI EN 12845 standard).

System start-up input connection terminal box.

ON FRONT PANEL

Diesel pump control unit with:

Multifunction instrument with display (voltmeter, ammeter, revolution counter, hours of operation counter, Diesel percentage level, oil pressure).

Start and Stop pushbuttons (one for each battery).

Status and alarm notification lamps.

Lamp test pushbutton.

First start-up TEST pushbutton (*).

Breakable glass protected rocker switch for pump start, bypassing the control unit in case of fault.

0 - 1 selector (0 = automatic disabled; 1 = automatic on), key removable only for position one (AUTOMATIC ON).

REMOTELY CONTROLLED ALARMS

Voltage present.

Phase sequence.

Pump start request from the pressure switches.

Pump start request from priming tank.

Pump in operation.

Start failed.

The above alarms can be remotely controlled in the following ways:

With relay wiring to the CSR-1 control panel.

With RS-485 wiring to the CSR-1 control panel.

With GSM Modem in the CSR-1 control panel, for forwarding status and/or alarm signals SMS (optional).

The control panel receives the signal from the pressure switches and starts the engine-driven pump also when no power network voltage is detected. The pump running status is detected through the speed/revolution sensor signal (as required by section 10.9.8 of UNI EN 12845). The panel is equipped with a start-up system with two 12V batteries (as required by section 10.9.8. of UNI EN 12845). If one of the batteries is faulty, the panel automatically starts the pump up using the other battery (6 alternated starts).

(*) When the engine-driven pump is put into operation on site for the first time, it will be necessary to check the start failure alarm (in accordance with section 10.9.12.2 of UNI EN 12845). For this purpose, on the front of the control panel is a TEST pushbutton that simulates no. 6 alternate start attempts on the two batteries, if there is no fuel. At the end of the TEST, the start failure alarm activates (lamp + N.O. contact)

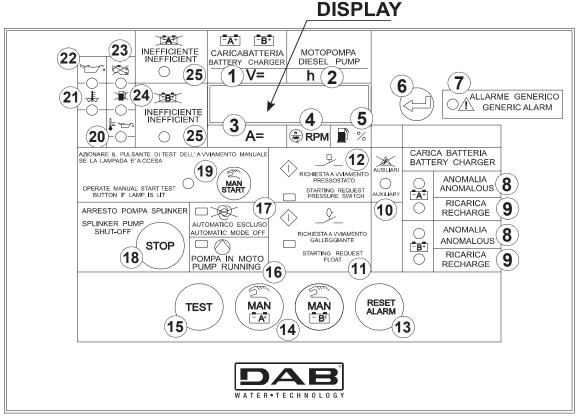


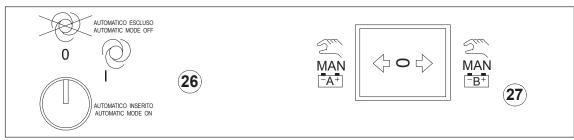
DIESEL PUMP CONTROL PANEL

UNI EN 12845 FIRE-FIGHTING PUMP SETS

DIESEL ENGINE-DRIVEN PUMP CONTROL UNIT

The A1 electronic pump control unit supplied with the control panel offers the following features: automatic start with 6 alternate pulses on the 2 batteries, with starter gear engaged check, manual start, battery efficiency check, particularly during start-up, automatic monitoring of pump set faults and display of battery charge signals.



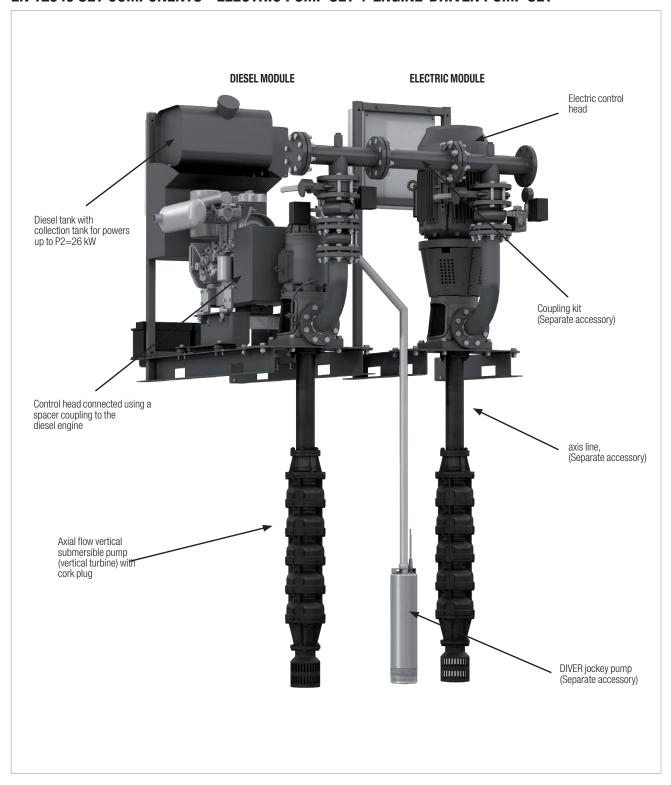


REF.	FUNCTION
1	A and B battery charger voltmeters
2	Hour meter
3	A and B battery charger ammeters
4	Hour meter
5	Fuel level gauge
6	- Press briefly to show instruments - Press and hold down for LED test
7	Generic alarm
8	Fault detected by the battery charger during battery charging
9	Battery charger ON
10	No power input to the battery charger detected alarm
11	Start request from the pump priming tank flow switch
12	START request (call) from the pressure switches
13	Fault reset

REF.	FUNCTION
14	Manual engine-driven pump start using batteries A and B (always active)
15	Start-up test
16	Engine-driven pump running
17	Automatic mode disabled
18	Engine-driven pump set stop pushbutton
19	Manual start test pushbutton and lamp
20	Oil or water heater not heating
21	Overtemperature alarm
22	Insufficient oil pressure alarm
23	Start failed alarm
24	Low fuel alarm
25	Faulty A and B battery alarm
26	Automatic mode disabling selector
27	Breakable glass protected pushbutton for emergency start of battery A or B

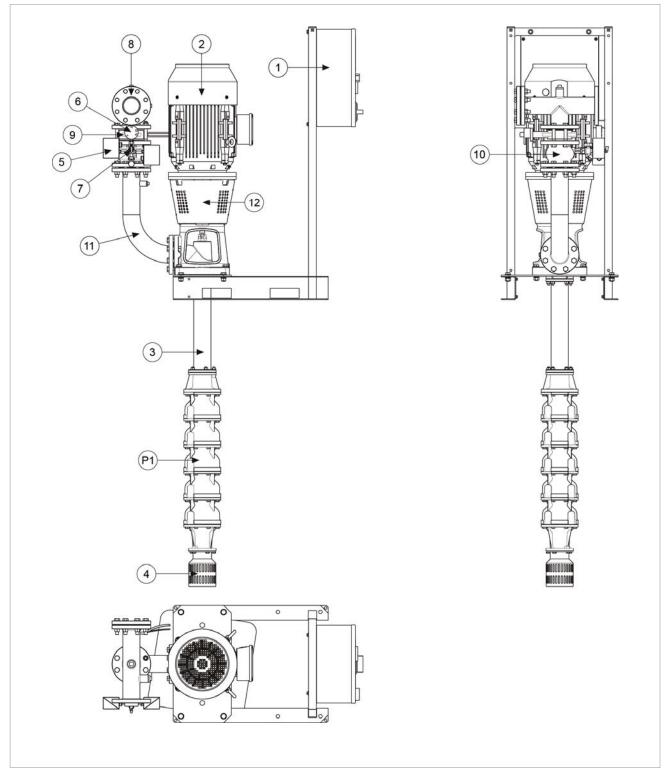


EN 12845 SET COMPONENTS - ELECTRIC PUMP SET + ENGINE-DRIVEN PUMP SET





EN 12845 SET COMPONENTS - ELECTRIC PUMP SET

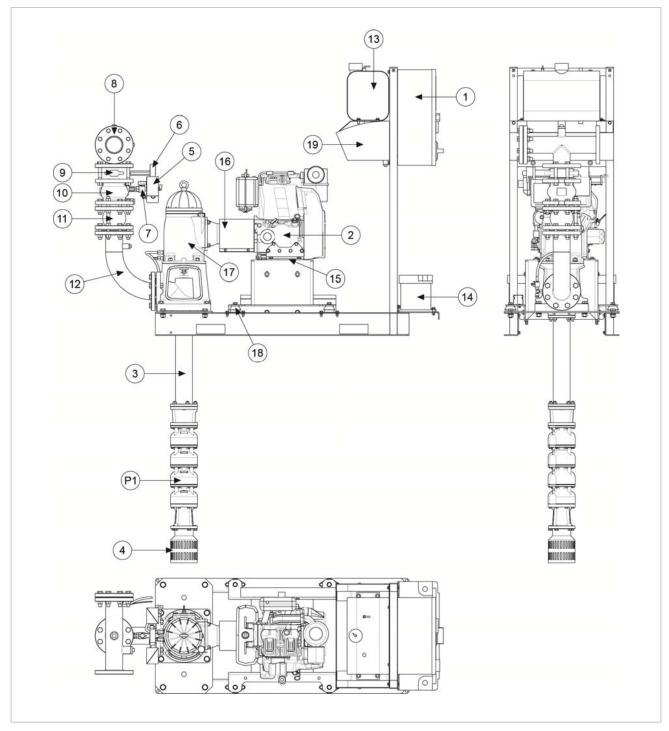


P1	Submersible pump	5	Pressure switch
1	Electric control panel	6	Manometer
2	Electric motor	7	ByPass
3	Axis line	8	Delivery manifold
4	Cork plug	9	Butterfly valve

10	Inspectable non-return valve
11	Bent delivery adaptor
12	Control head



UNI EN 12845 SET COMPONENTS - ENGINE-DRIVEN PUMP SET



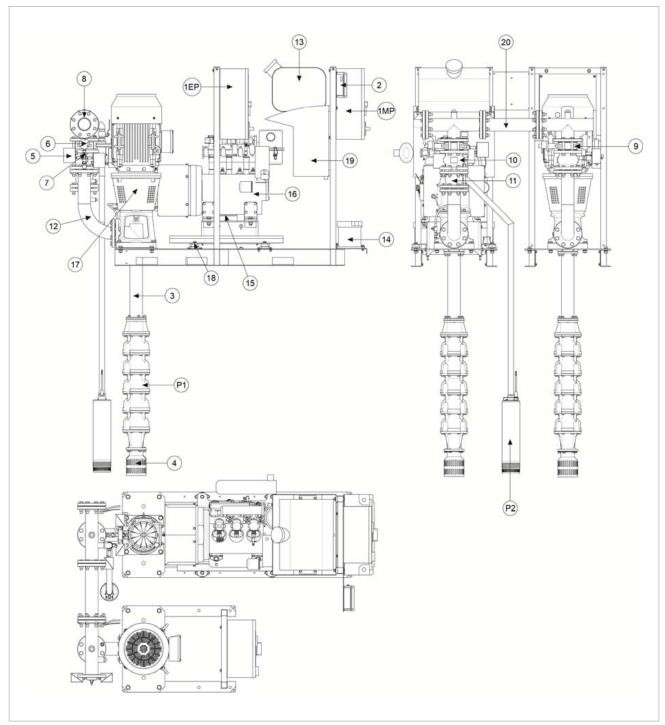
P1	Submersible pump
1	Electric control panel
2	Diesel engine
3	Axis line
4	Cork plug
5	Pressure switch
6	Manometer
6	Manometer

_		
	7	ByPass
	8	Delivery manifold
	9	Butterfly valve
Γ	10	Inspectable non-return valve
	11	Anti-vibration coupling
	12	Bent delivery adaptor
	13	20 litre diesel engine-driven pump tank
_		

14	Diesel engine-driven pump starter batteries
15	Oil heater
16	Elastic coupling
17	Control head
18	Anti-vibration foot
19	Diesel collection tank



EN 12845 SET COMPONENTS - ENGINE-DRIVEN PUMP + ELECTRIC PUMP + JOCKEY PUMP



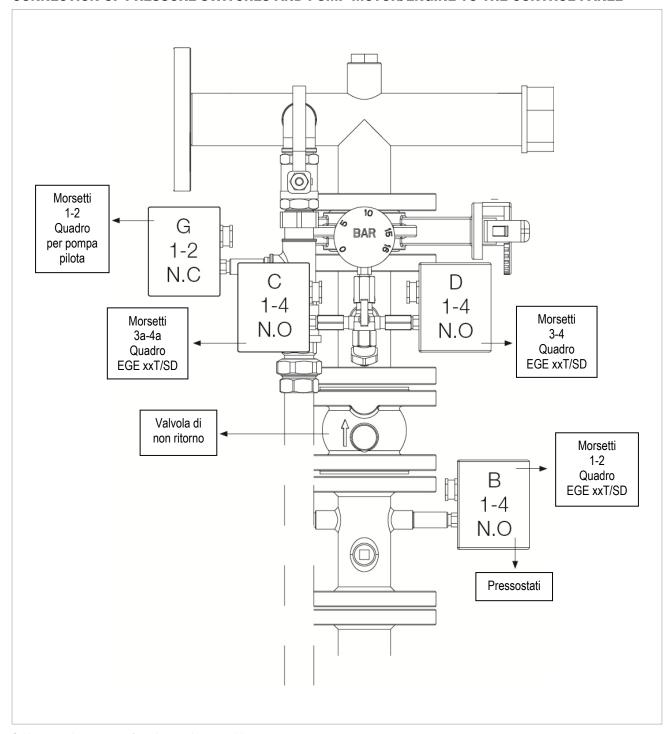
P1	Submersible pump
P2	Jockey pump
1EP	Electric pump electric control panel
1DP	Engine-driven pump electric control panel
2	Jockey pump control panel
3	Axis line
4	Cork plug
5	Pressure switch

6	Manometer
7	ByPass
8	Delivery manifold
9	Butterfly valve
10	Inspectable non-return valve
11	Anti-vibration coupling
12	Bent delivery adaptor
13	Diesel engine-driven pump tank

14	Diesel engine-driven pump starter batteries
15	Oil heater
16	Diesel engine
17	Control head
18	Anti-vibration foot
19	Diesel collection tank
20	Coupling kit



CONNECTION OF PRESSURE SWITCHES AND PUMP MOTOR/ENGINE TO THE CONTROL PANEL



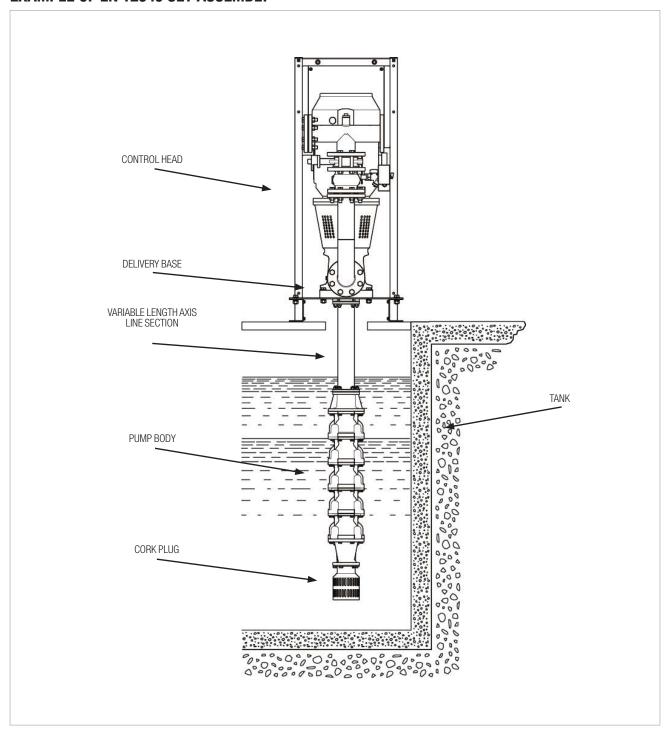
Cable connection sequence for submerged pumps with start:

	DOL DIRECT START-UP									
POWER MOTOR	TERMINAL BOX Control Panel Egexx T	CABLE COLOUR ELECTRIC PUMP SUBMERSIBLE								
UP TO	U1	BLACK								
7.5 kW	V1	BLUE OR GREY								
	W1	BROWN								

STAR/TRIANGLE										
	TERMINAL BOX CONTROL PANEL EGEXX T SD	CABLE COLOUR ELECTRIC PUMP SUBMERSIBLE								
POWER	U1	BLACK								
MOTOR	V1	BLUE OR GREY								
OVER 7.5 kW	W1	BROWN								
7.5 KW	U2	BROWN								
	V2	BLACK								
	W2	BLUE OR GREY								



EXAMPLE OF EN 12845 SET ASSEMBLY



Assembly consists in the assembly and installation of the vertical set as shown in the figure



E.FIRE MONITOR

DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS



TECHNICAL DATA

Nominal power input voltage: 230/400 Vac +/-10% (power

input voltage 230 Vac)

Phases: 1+N (230 V) 1+1 (400 V)

Frequency: 50-60 Hz

Sound power level: 75 dB at 30 cm 12 Vdc

Absorption: 0,1 Amp

Battery type: 12 V 1.2 Ah lead battery, sealed, Faston contact **Acoustic alarm autonomy in case of power cut:** 5 hours **Characteristic features of the serial communication cable:** 2 twisted wire shielded cable plus shield, 600 V, class 1, 15-18 AWG. Maximum impedance 120 ohm, maximum capacity 50 pF/m. **Ambient temperature operation limits:** -10 °C + 50 °C

Relative humidity: 50 % at 40 °C MAX (90 % at 20 °C) without

condensation

Max. altitude: 2000m (asl) Protection class: IP54

Construction: Max RS485 line length 500 m

ACCESSORY - E.FIRE MONITOR CONTROL PANEL

The UNI EN 12845 standard requires that a range of alarms are forwarded to a permanently manned location, inside or outside the building, or to a plant manager.

In order to fulfil this requirement of the UNI EN 12845 standard, it is possible to use the E.FIRE MONITOR alarm control unit, which notifies the operating conditions of the fire-fighting pump station by means of an acoustic signal.

The E.FIRE MONITOR alarm control unit can be connected to the fire-fighting pump station using a telephone pair (485 serial type connection), to the electric or diesel engine-driven pump control panels.

One single E.Fire Monitor can control up to three pump sets, electric or Diesel, in the various required configurations.

FUNCTIONS

The control unit visually and acoustically notifies, by LED and buzzer respectively, the operating conditions of the pump sets in the different installation solutions:

all the possible combinations with up to three pumping units maximum

E.Fire Monitor is a necessary accessory for the supervision of remote alarms, and guarantees autonomy of at least 5 hours, as far as the operation of the alarms, in case of electric power cuts. It is also possible to connect a GSM Modem (optional), in order to display alarms on a mobile phone, receiving system status SMS messages.

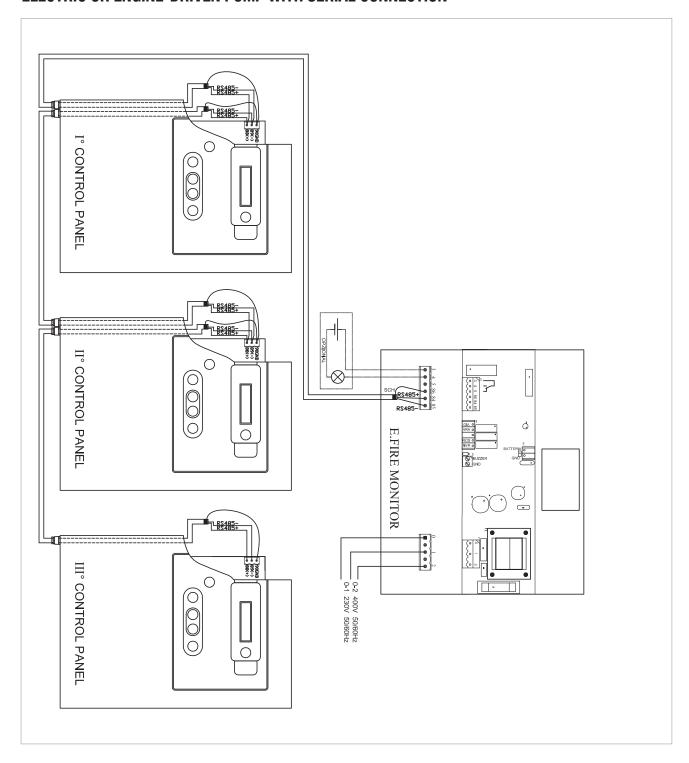
Alarms may be replicated at two different positions by connecting two E.Fire Monitors.



E.FIRE MONITOR

DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS

DIAGRAM FOR THE CONNECTION OF E.FIRE MONITOR TO THE CONTROL PANELS ELECTRIC OR ENGINE-DRIVEN PUMP WITH SERIAL CONNECTION





CSR-1 ALARM CONTROL PANEL

DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS



TECHNICAL DATA

Nominal power input voltage: 230 a.c. +/- 10%

Phases: 1

Frequency: 50-60 Hz Sound power level: 75 dB A Absorption: 0,1 Amp

Battery type: 12 V; 2,3 Ah lead battery (Faston output)
Acoustic alarm autonomy in case of power cut: 20 hours
Characteristic features of the serial communication cable:
2 twisted wire shielded cable plus shield, 600 V, class 1, 15-18 AWG.

Maximum impedance 120 ohm, maximum capacity 50 pF/m. **Ambient temperature operation limits:** -10 °C + 40 °C

Relative humidity: 50 % at 40 °C MAX (90 % at 20 °C) without

condensation

Max. altitude: 2500 m (asl) Protection class: IP55

Construction: According to UNI EN 12845

ACCESSORY - CSR-1 ALARM CONTROL PANEL

The UNI EN 12845 standard requires that a range of alarms are forwarded to a permanently manned location, inside or outside the building, or to a plant manager.

In order to fulfil this requirement of the UNI EN 12845 standard, it is possible to use the CSR-1 alarm control panel, which notifies the operating conditions of the fire-fighting pump stations by means of an acoustic signal.

The CSR-1 alarm control unit can be connected to the fire-fighting pump station using multi-conductor cables (contact connection), or using a telephone pair (485 serial type connection), to the electric or Diesel engine-driven pump control panels.

One single CSR-1 can control one or both pumps, electric or Diesel, in the various required configurations.

FUNCTIONS

The control unit controls and notifies, using a 2x16 character display - visually by means of LEDs, and acoustically by means of a buzzer -, the operating conditions of the pump sets in the different installation solutions:

- system for one electric pump,
- system for two electric pumps,
- system for electric pump and Diesel pump,
- system for Diesel pump,
- system for two Diesel pumps.

The CSR-1 is a necessary accessory for the supervision of remote alarms, and guarantees autonomy of at least 20 hours as far as the operation of the alarms in case of power cuts from the electricity network. It is also possible to connect a GSM Modem (optional) in order to display alarms on a mobile phone, receiving system status SMS messages.

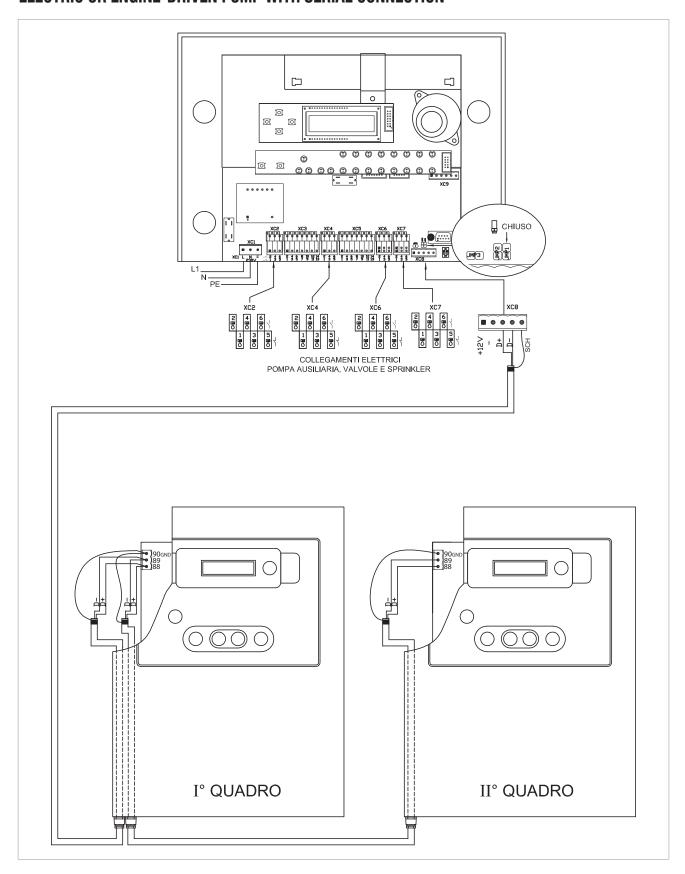
It is possible to remotely forward a cumulative signal of all the alarms using one output (XC9) with clean contact (without voltage) with remote silencing.



CSR-1 ALARM CONTROL PANEL

DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS

DIAGRAM FOR THE CONNECTION OF CSR-1 TO THE CONTROL PANELS ELECTRIC OR ENGINE-DRIVEN PUMP WITH SERIAL CONNECTION

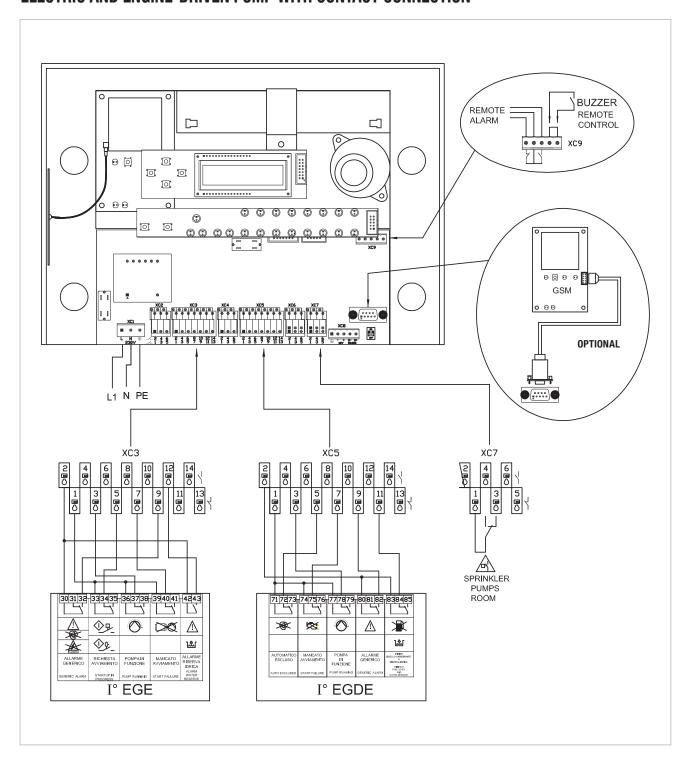




CSR-1 ALARM CONTROL PANEL

DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS

DIAGRAM FOR THE CONNECTION OF CSR-1 TO THE CONTROL PANELS ELECTRIC AND ENGINE-DRIVEN PUMP WITH CONTACT CONNECTION

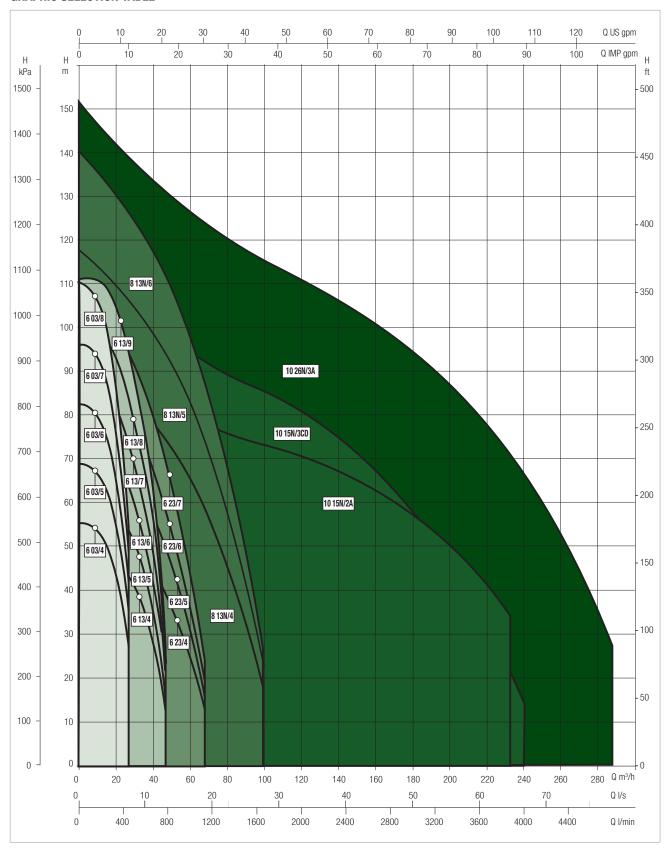




PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

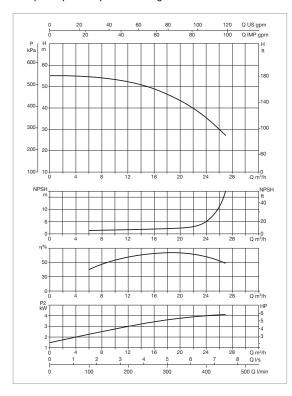
GRAPHIC SELECTION TABLE



For higher performances contact our sales team



Pumped liquid temperature range: from 0 $^{\circ}$ C to +40 $^{\circ}$ C - Ambient temperature range: from +4 $^{\circ}$ C to +40 $^{\circ}$ C



KVT EN 12845 ELECTRIC PUMP

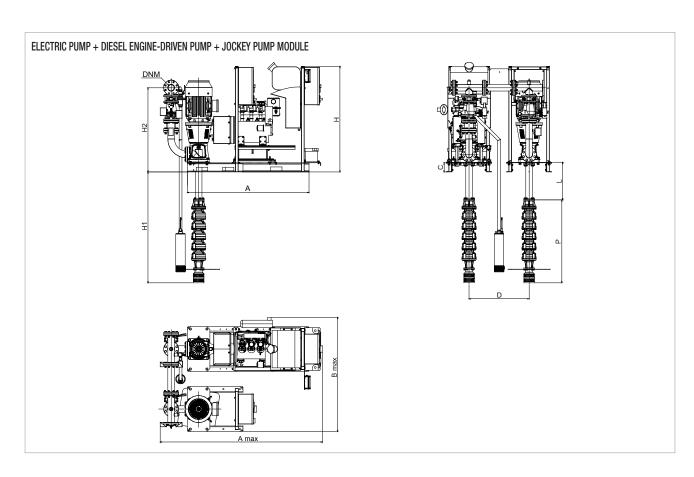
MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In A	MEASURING KIT	
		1 OWII	kW	kW	Λ.		
1KVT6 03/4 5,5 400/50	3 x 400 V	DIVER 150 T	5.5	1.0	10.4	FLOW METER DN80	

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY PUMP*	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA FAN	DIESEL COLLECTION TANK
1KVT6 03/4 7.1 MD	1 x 220-240 V	DIVER 150 T	7.1	1.0	0.22 m ²	20 I included

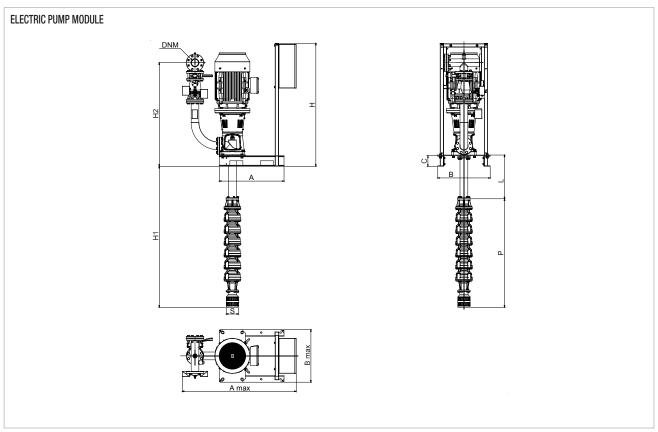
^{*} Jockey pump on request.

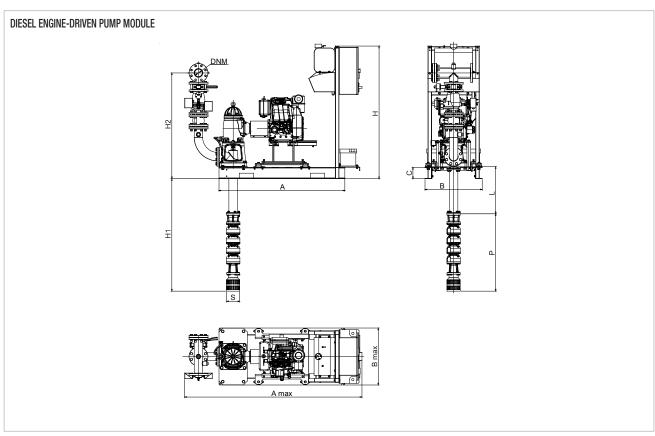
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.





 $^{^{\}star\star}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

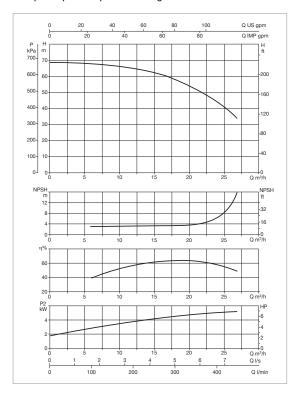




MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	Н3	DNM
1KVT6 03/4 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1330	1934		1602	120	1406	1183	820		2000	2700				80
1KVT6 03/4 5.5 400/50 - ELECTRIC PUMP MODULE	740	1305	599	599	120	1406	1183	820	Ø 140	2000	2700				80
1KVT6 03/4 7.1 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1330	1934	603	603	120	1406	1183	820	Ø 140	2000	2700	-	-	-	80



Pumped liquid temperature range: from 0 $^{\circ}$ C to +40 $^{\circ}$ C - Ambient temperature range: from +4 $^{\circ}$ C to +40 $^{\circ}$ C



KVT EN 12845 ELECTRIC PUMP

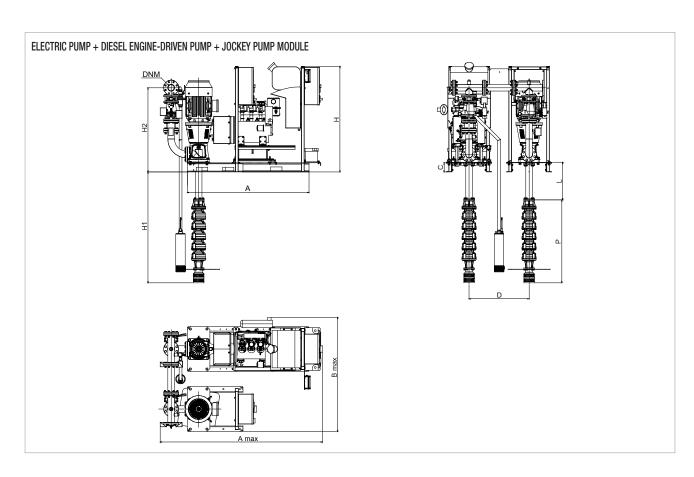
MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In A	MEASURING KIT	
		1 OWII	kW	kW	Λ.		
1KVT6 03/5 7,5 400/50	3 x 400 V	DIVER 150 T	7.5	1.0	13.4	FLOW METER DN80	

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA FAN	DIESEL COLLECTION TANK
1KVT6 03/5 7.1 MD	1 x 220-240 V	DIVER 150 T	7.1	1.0	0.22 m ²	20 I included

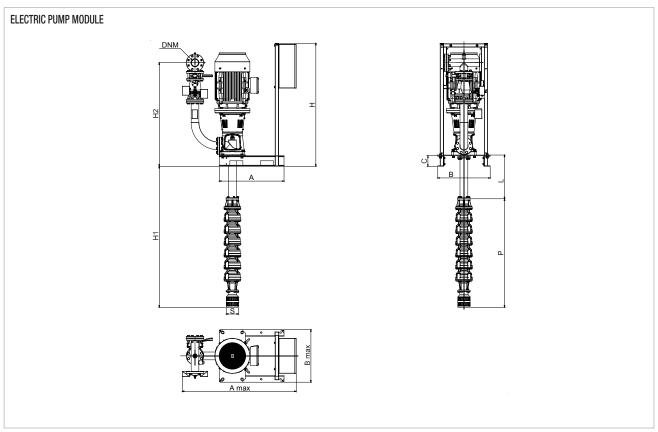
^{*} Jockey pump on request.

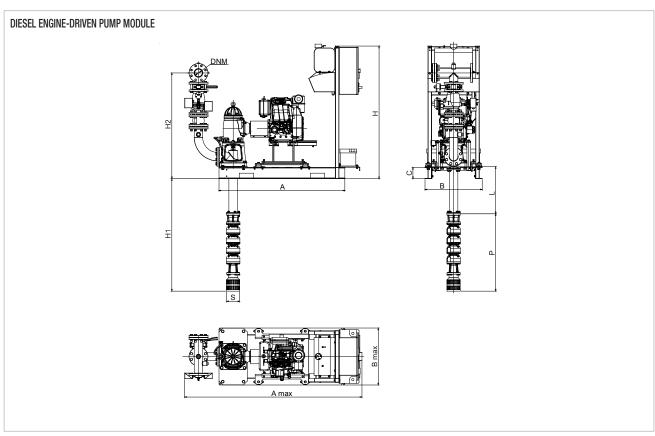
The performance curves are based on kinematic viscosity values = 1 mm 2 /s and density equal to 1000 kg/m 3 . Curve tolerance according to ISO 9906.





 $^{^{\}star\star}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

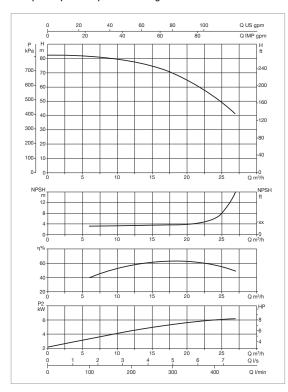




MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	Н3	DNM
1KVT6 03/5 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1330	1934		1602	120	1406	1183	922		2000	2802				80
1KVT6 03/5 7.5 400/50 - ELECTRIC PUMP MODULE	740	1305	599	599	120	1406	1183	922	Ø 140	2000	2802				80
1KVT6 03/5 7.1 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1330	1934	603	603	120	1406	1183	922	Ø 140	2000	2802	-	-	-	80



Pumped liquid temperature range: from 0 $^{\circ}$ C to +40 $^{\circ}$ C - Ambient temperature range: from +4 $^{\circ}$ C to +40 $^{\circ}$ C



KVT EN 12845 ELECTRIC PUMP

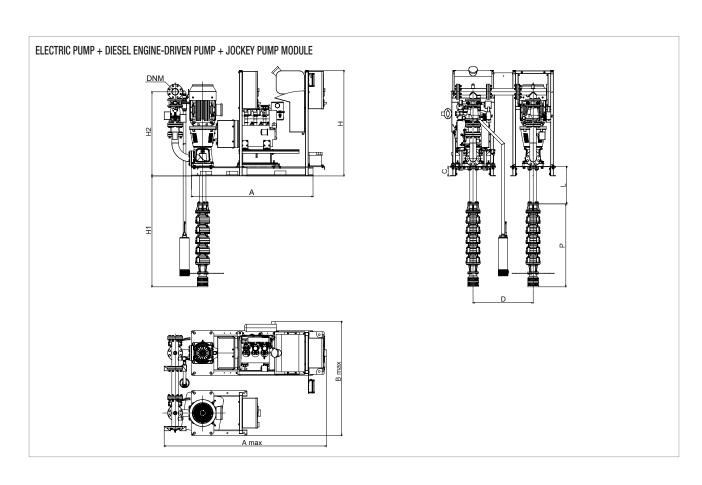
MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In A	MEASURING KIT	
		1 OWII	kW	kW	Λ.		
1KVT6 03/6 7,5 400/50	3 x 400 V	DIVER 200 T	7.5	1.5	13.4	FLOW METER DN80	

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA FAN	DIESEL COLLECTION TANK
1KVT6 03/6 11 MD	1 x 220-240 V	DIVER 200 T	11	1.5	0.22 m ²	20 I included

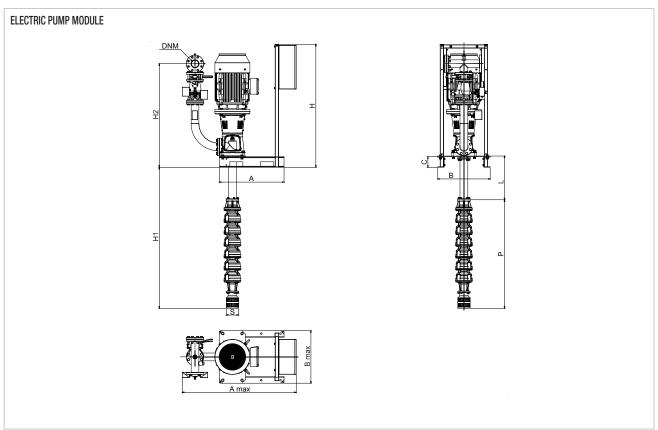
^{*} Jockey pump on request.

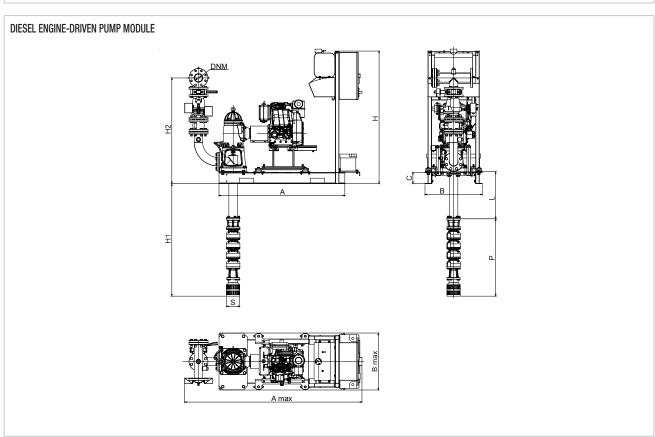
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.





 $^{^{**}}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

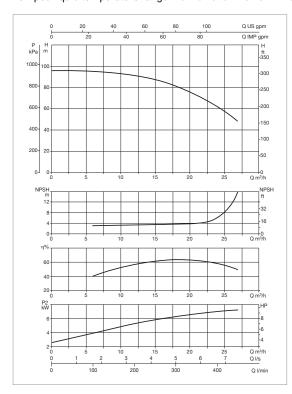




MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	Н3	DNM
1KVT6 03/6 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1330	1934		1602	120	1406	1183	1025		2000	2905				80
1KVT6 03/6 7.5 400/50 - ELECTRIC PUMP MODULE	740	1305	599	599	120	1406	1183	1025	Ø 140	2000	2905				80
1KVT6 03/6 11 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1330	1934	603	603	120	1406	1183	1025	Ø 140	2000	2905	-	-	-	80



Pumped liquid temperature range: from 0 $^{\circ}$ C to +40 $^{\circ}$ C - Ambient temperature range: from +4 $^{\circ}$ C to +40 $^{\circ}$ C



KVT EN 12845 ELECTRIC PUMP

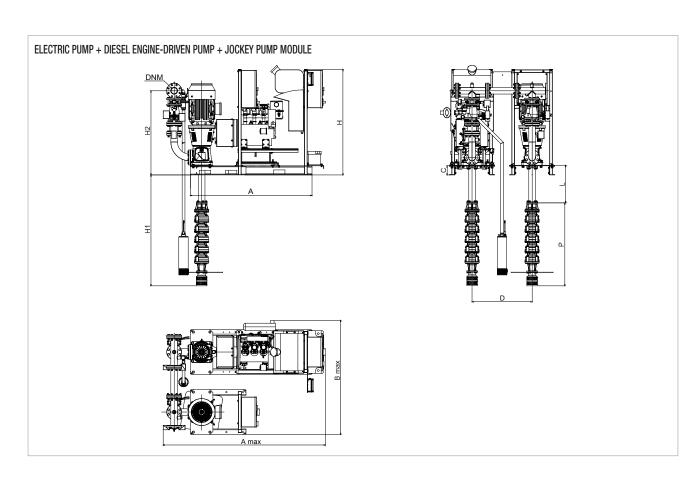
MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In A	MEASURING KIT
		1 OWII	kW	kW	Λ.	MI
1KVT6 03/7 11 400/50	3 x 400 V	DIVER 200 T	11	1.5	19.4	FLOW METER DN80

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL Engine- Driven Pump kw	P2 JOCKEY PUMP kW	AREA Fan	DIESEL COLLECTION TANK
1KVT6 03/7 11 MD	1 x 220-240 V	DIVER 200 T	11	1.5	0.22 m ²	20 I included

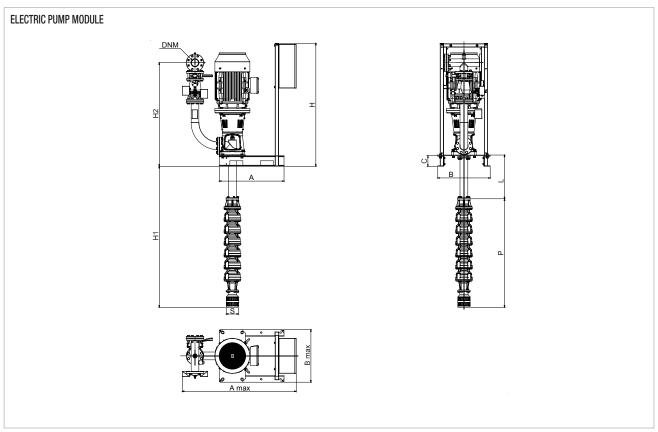
^{*} Jockey pump on request.

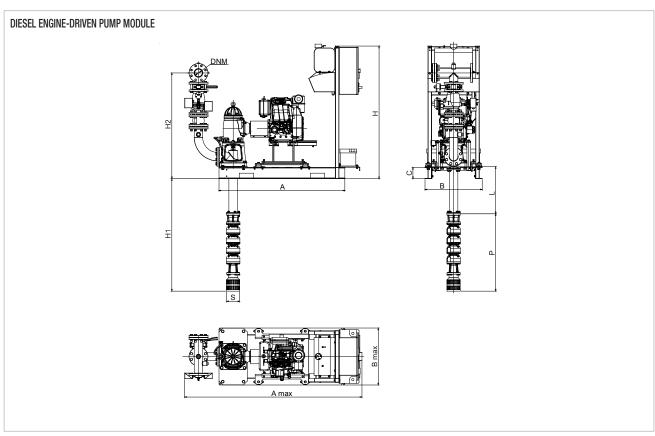
The performance curves are based on kinematic viscosity values = 1 mm 2 /s and density equal to 1000 kg/m 3 . Curve tolerance according to ISO 9906.





 $^{^{\}star\star}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

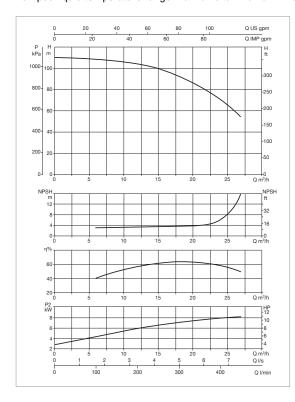




MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	НЗ	DNM
1KVT6 03/7 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1330	1934		1602	120	1406	1183	1127		2000	3007				80
1KVT6 03/7 11 400/50 - ELECTRIC PUMP MODULE	740	1305	599	599	120	1406	1183	1127	Ø 140	2000	3007				80
1KVT6 03/7 11 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1330	1934	603	603	120	1406	1183	1127	Ø 140	2000	3007	-	-	-	80



Pumped liquid temperature range: from 0 $^{\circ}$ C to +40 $^{\circ}$ C - Ambient temperature range: from +4 $^{\circ}$ C to +40 $^{\circ}$ C



KVT EN 12845 ELECTRIC PUMP

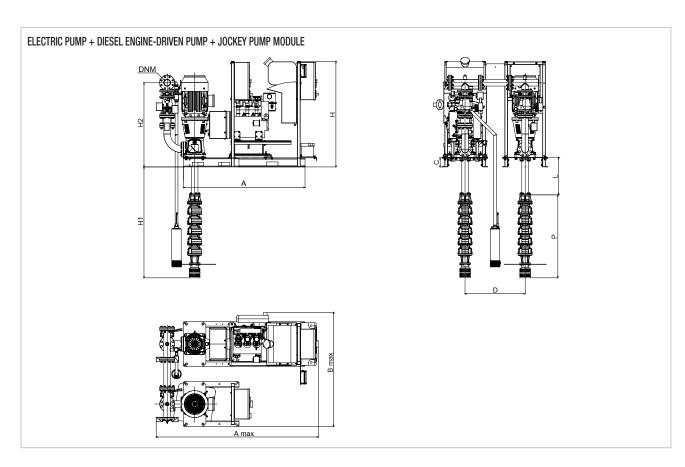
MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In A	MEASURING KIT
		1 OWII	kW	kW	Λ.	MI
1KVT6 03/8 11 400/50	3 x 400 V	DIVER 200 T	11	1.5	19.4	FLOW METER DN80

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY PUMP*	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA FAN	DIESEL COLLECTION TANK
1KVT6 03/8 11 MD	1 x 220-240 V	DIVER 200 T	11	1.5	0.22 m ²	20 I included

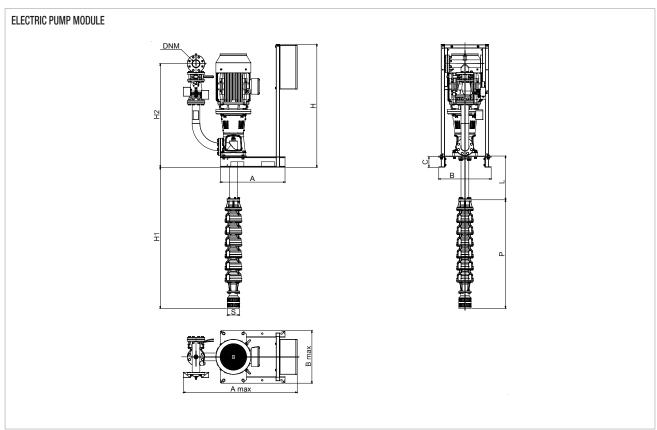
^{*} Jockey pump on request.

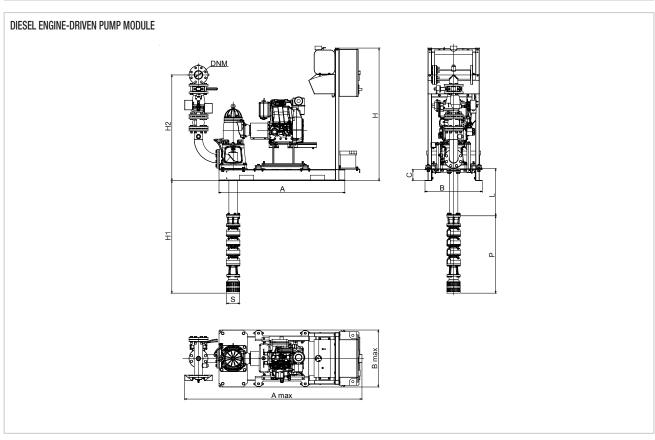
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.





 $^{^{**}}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

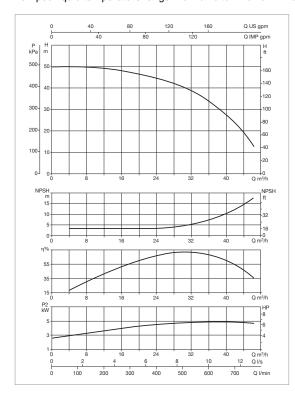




MODEL	А	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	НЗ	DNM
1KVT6 03/8 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1330	1934		1602	120	1406	1183	1230		2000	3110				80
1KVT6 03/8 11 400/50 - ELECTRIC PUMP MODULE	740	1305	599	599	120	1406	1183	1230	Ø 140	2000	3110				80
1KVT6 03/8 11 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1330	1934	603	603	120	1406	1183	1230	Ø 140	2000	3110	-	-	-	80



Pumped liquid temperature range: from 0 °C to +40 °C - Ambient temperature range: from +4 °C to +40 °C



KVT EN 12845 ELECTRIC PUMP

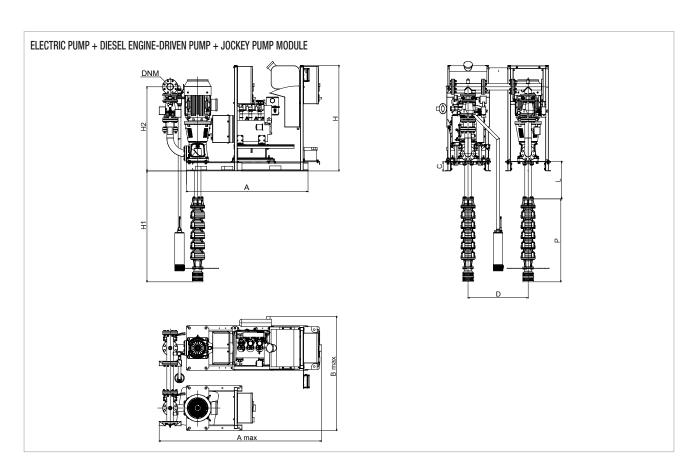
MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In A	MEASURING KIT
		1 OWII	kW	kW	Λ.	MI
1KVT6 13/4 7,5 400/50	3 x 400 V	DIVER 150 T	7.5	1.0	13.4	FLOW METER DN80

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA Fan	DIESEL COLLECTION TANK
1KVT6 13/4 7.1 MD	1 x 220-240 V	DIVER 150 T	7.1	1.0	0.22 m ²	20 I included

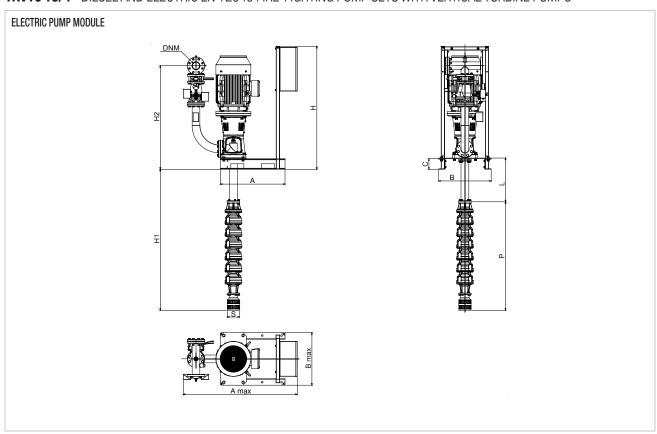
^{*} Jockey pump on request.

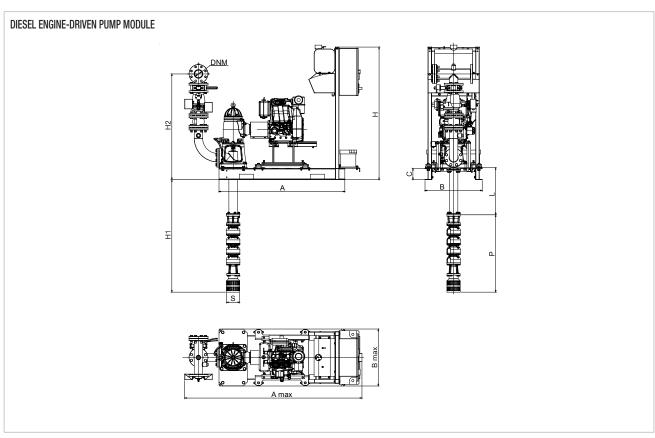
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.





 $^{^{\}star\star}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

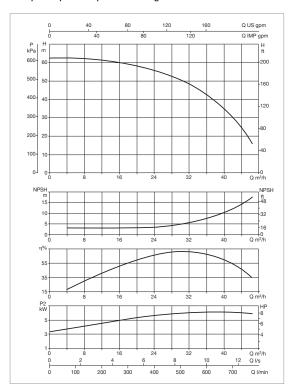




MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	Н3	DNM
1KVT6 13/4 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1330	1934		1602	120	1406	1183	820		2000	2700				80
1KVT6 13/4 7.5 400/50 - ELECTRIC PUMP MODULE	740	1305	599	599	120	1406	1183	820	Ø 140	2000	2700				80
1KVT6 13/4 7.1 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1330	1934	603	603	120	1406	1183	820	Ø 140	2000	2700	-	-	-	80



Pumped liquid temperature range: from 0 °C to +40 °C - Ambient temperature range: from +4 °C to +40 °C



KVT EN 12845 ELECTRIC PUMP

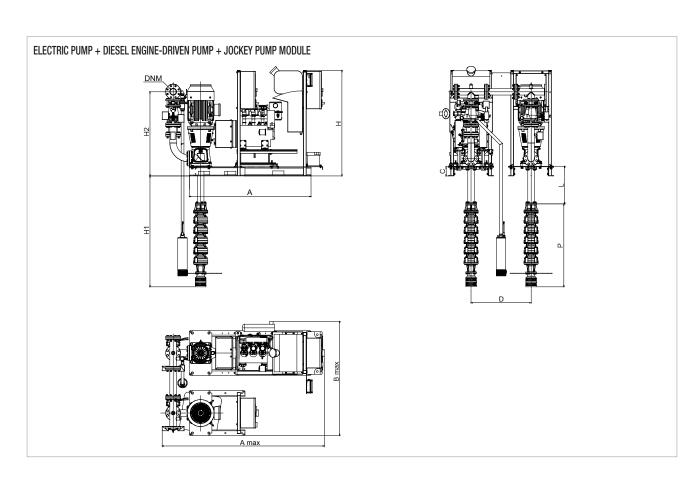
MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In A	MEASURING KIT
		1 OWII	kW	kW	Λ.	MI
1KVT6 13/5 7,5 400/50	3 x 400 V	DIVER 150 T	7.5	1.0	13.4	FLOW METER DN80

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA FAN	DIESEL COLLECTION TANK
1KVT6 13/5 11 MD	1 x 220-240 V	DIVER 150 T	11	1.0	0.22 m ²	20 I included

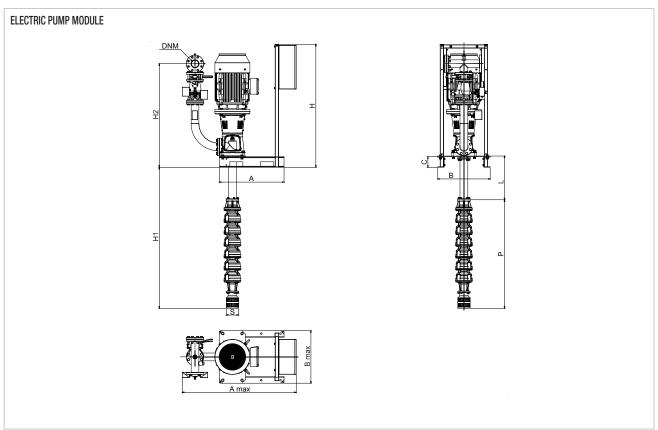
^{*} Jockey pump on request.

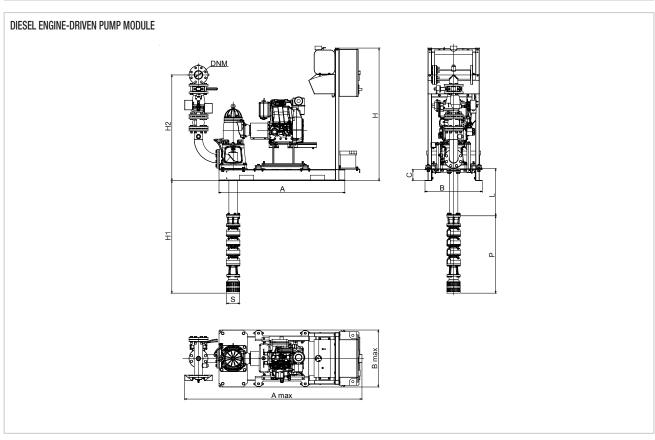
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.





 $^{^{\}star\star}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

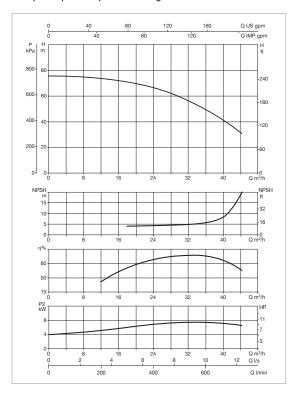




MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	Н3	DNM
1KVT6 13/5 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1330	1934		1602	120	1406	1183	922		2000	2802				80
1KVT6 13/5 7.5 400/50 - ELECTRIC PUMP MODULE	740	1305	599	599	120	1406	1183	922	Ø 140	2000	2802				80
1KVT6 13/5 11 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1330	1934	603	603	120	1406	1183	922	Ø 140	2000	2802	-	-	-	80



Pumped liquid temperature range: from 0 °C to +40 °C - Ambient temperature range: from +4 °C to +40 °C



KVT EN 12845 ELECTRIC PUMP

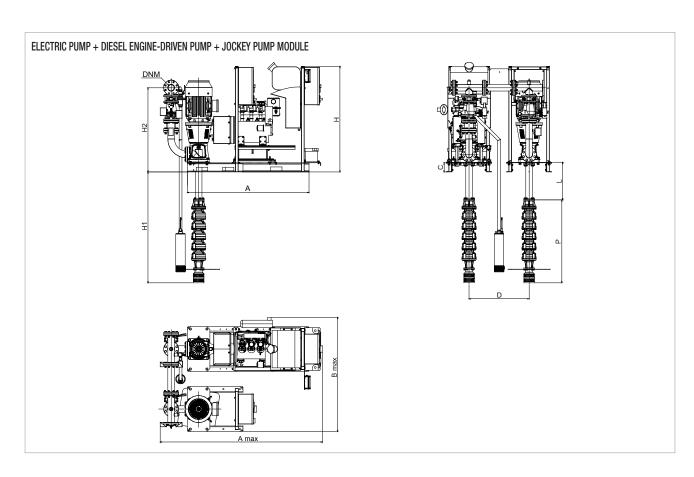
MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In Δ	MEASURING KIT	
		1 OWN	kW	kW	Λ.		
1KVT6 13/6 11 400/50	3 x 400 V	DIVER 150 T	11	1.0	19.4	FLOW METER DN80	

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA FAN	DIESEL COLLECTION TANK
1KVT6 13/6 11 MD	1 x 220-240 V	DIVER 150 T	11	1.0	0.22 m ²	20 I included

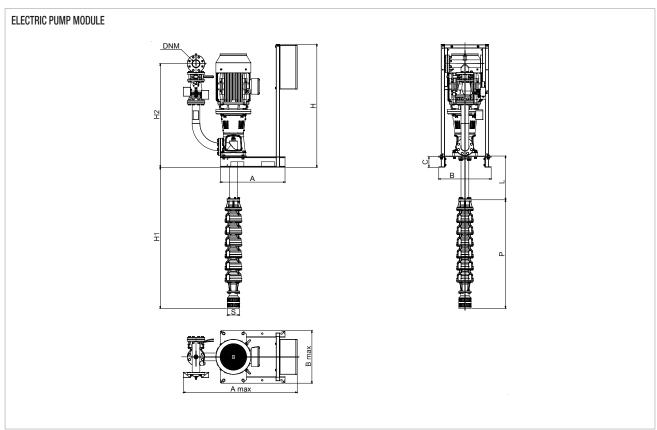
^{*} Jockey pump on request.

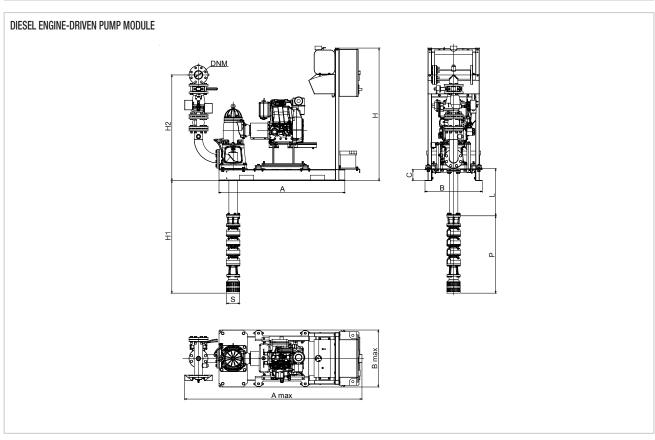
The performance curves are based on kinematic viscosity values = 1 mm 2 /s and density equal to 1000 kg/m 3 . Curve tolerance according to ISO 9906.





 $^{^{\}star\star}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

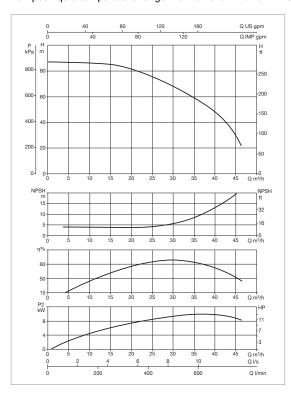




MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	НЗ	DNM
1KVT6 13/6 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1330	1934		1602	120	1406	1183	1025		2000	2905				80
1KVT6 13/6 11 400/50 - ELECTRIC PUMP MODULE	740	1305	599	599	120	1406	1183	1025	Ø 140	2000	2905				80
1KVT6 13/6 11 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1330	1934	603	603	120	1406	1183	1025	Ø 140	2000	2905	-	-	-	80



Pumped liquid temperature range: from 0 °C to +40 °C - Ambient temperature range: from +4 °C to +40 °C



KVT EN 12845 ELECTRIC PUMP

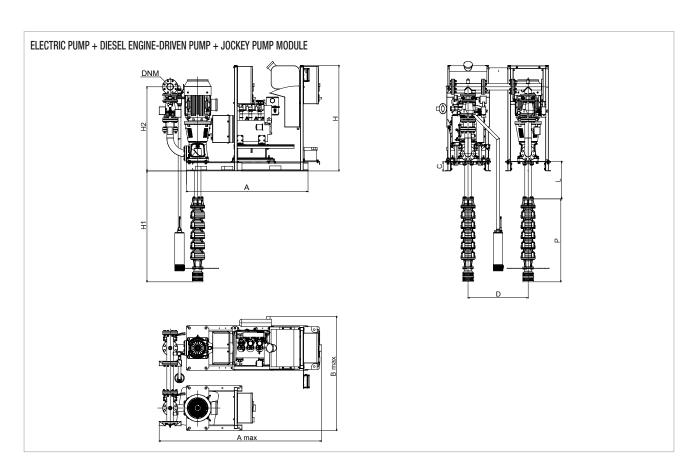
MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In Δ	MEASURING KIT	
		1 OWN	kW	kW	Λ.		
1KVT6 13/7 11 400/50	3 x 400 V	DIVER 200 T	11	1.5	19.4	FLOW METER DN80	

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY PUMP*	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA FAN	DIESEL COLLECTION TANK
1KVT6 13/7 11 MD	1 x 220-240 V	DIVER 200 T	11	1.5	0.22 m ²	20 I included

^{*} Jockey pump on request.

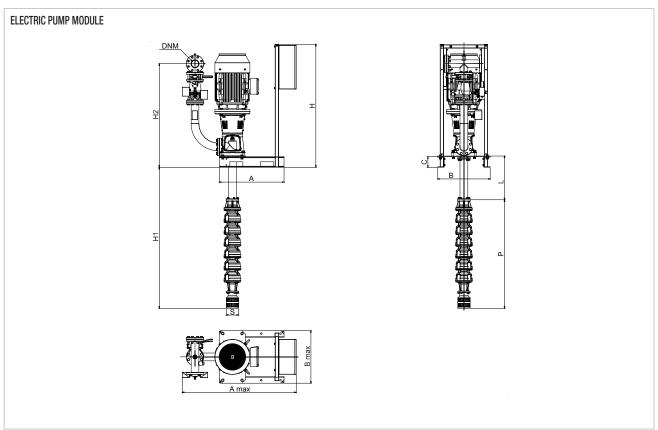
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

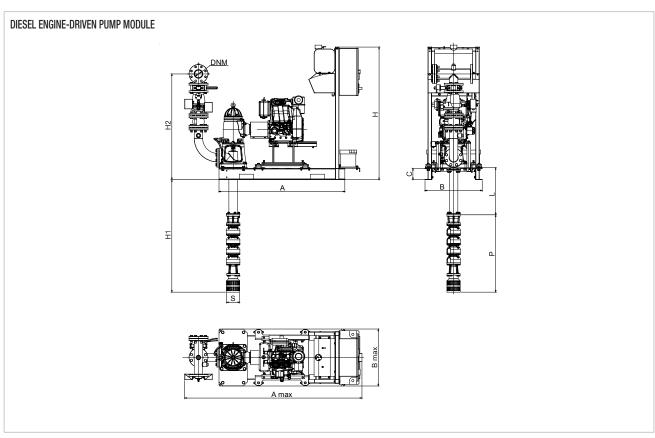




 $^{^{**}}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

1KVT6 13/7 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS



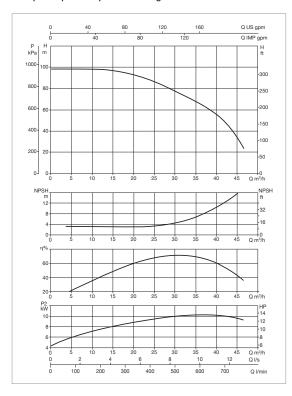


MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	Н3	DNM
1KVT6 13/7 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1330	1934		1602	120	1406	1183	1127		2000	3007				80
1KVT6 13/7 11 400/50 - ELECTRIC PUMP MODULE	740	1305	599	599	120	1406	1183	1127	Ø 140	2000	3007				80
1KVT6 13/7 11 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1330	1934	603	603	120	1406	1183	1127	Ø 140	2000	3007	-	-	-	80



1KVT6 13/8 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS

Pumped liquid temperature range: from 0 °C to +40 °C - Ambient temperature range: from +4 °C to +40 °C



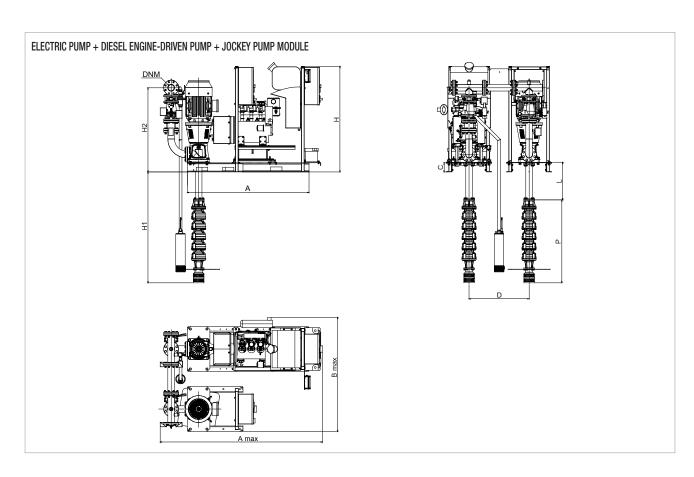
KVT EN 12845 ELECTRIC PUMP

MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In A	MEASURING KIT
		1 OWII	kW	kW	Λ.	MI
1KVT6 13/8 15 400/50	3 x 400 V	DIVER 200 T	15	1.5	26.5	FLOW METER DN80

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA Fan	DIESEL COLLECTION TANK
1KVT6 13/8 15 MD	1 x 220-240 V	DIVER 200 T	15	1.5	0.22 m ²	50 I included

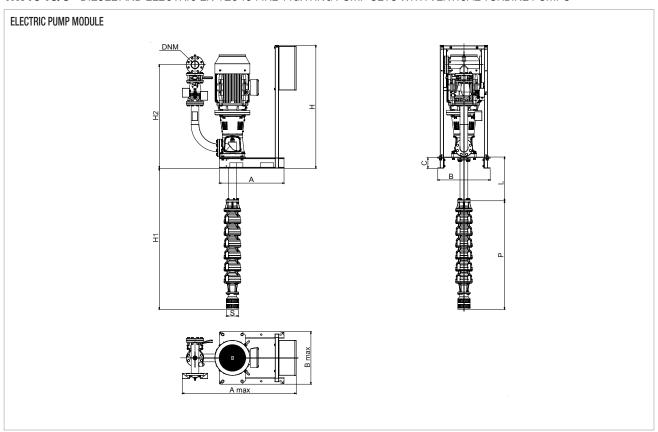
^{*} Jockey pump on request.

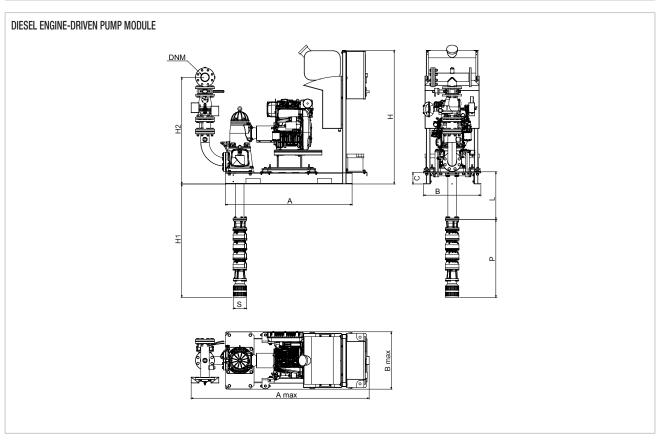




 $^{^{\}star\star}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

1KVT6 13/8 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS



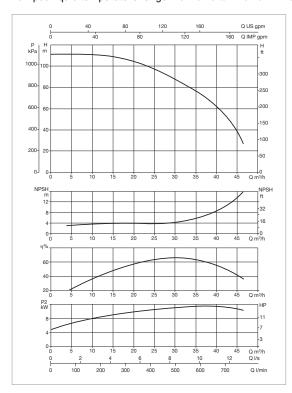


MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	Н3	DNM
1KVT6 13/8 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1330	1872		1602	120	1406	1183	1230		2000	3110				80
1KVT6 13/8 15 400/50 - ELECTRIC PUMP MODULE	740	1334	599	599	120	1406	1183	1230	Ø 140	2000	3110				80
1KVT6 13/8 15 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1330	1872	603	603	120	1406	1121	1230	Ø 140	2000	3110	-	-	-	80



1KVT6 13/9 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS

Pumped liquid temperature range: from 0 °C to +40 °C - Ambient temperature range: from +4 °C to +40 °C



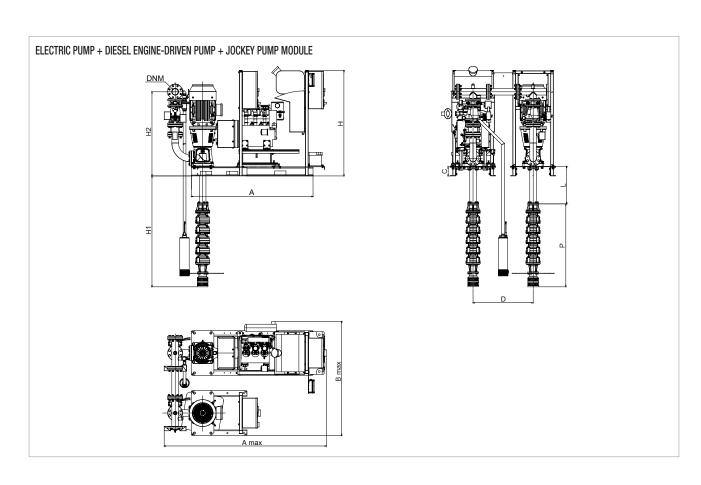
KVT EN 12845 ELECTRIC PUMP

MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In A	MEASURING KIT
		1 OWII	kW	kW		MI
1KVT6 13/9 15 400/50	3 x 400 V	DIVER 200 T	15	1.5	26.5	FLOW METER DN80

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA FAN	DIESEL COLLECTION TANK
1KVT6 13/9 15 MD	1 x 220-240 V	DIVER 200 T	15	1.5	0.22 m ²	50 I included

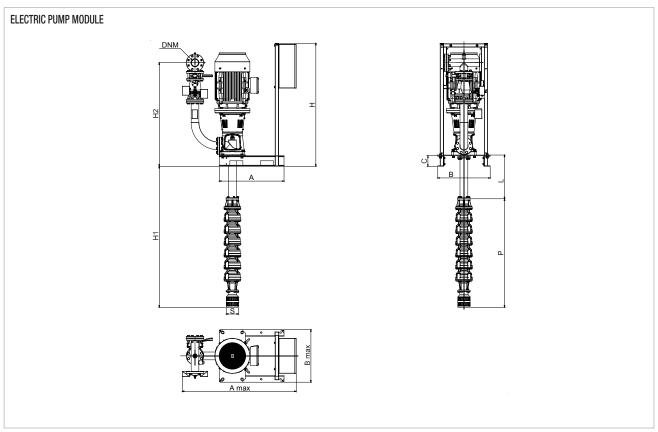
^{*} Jockey pump on request.

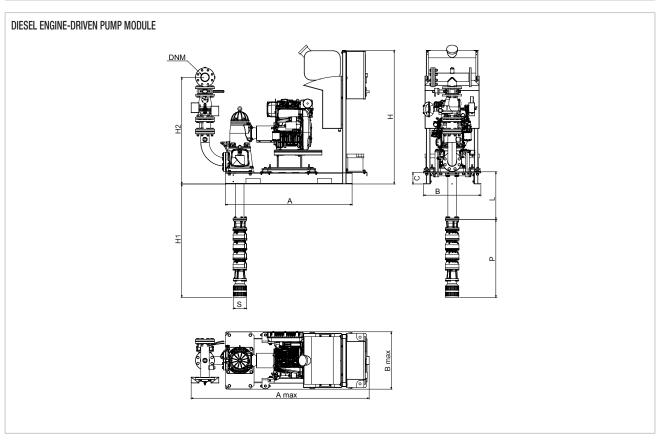




 $^{^{**}}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

1KVT6 13/9 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS



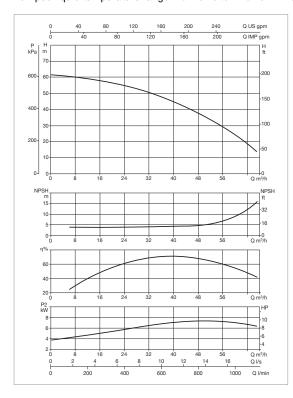


MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	Н3	DNM
1KVT6 13/9 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1330	1872		1602	120	1406	1183	1332		2000	3212				80
1KVT6 13/9 15 400/50 - ELECTRIC PUMP MODULE	740	1334	599	599	120	1406	1183	1332	Ø 140	2000	3212				80
1KVT6 13/9 15 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1330	1872	603	603	120	1406	1121	1332	Ø 140	2000	3212	-	-	-	80



1KVT6 23/4 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS

Pumped liquid temperature range: from 0 $^{\circ}$ C to +40 $^{\circ}$ C - Ambient temperature range: from +4 $^{\circ}$ C to +40 $^{\circ}$ C



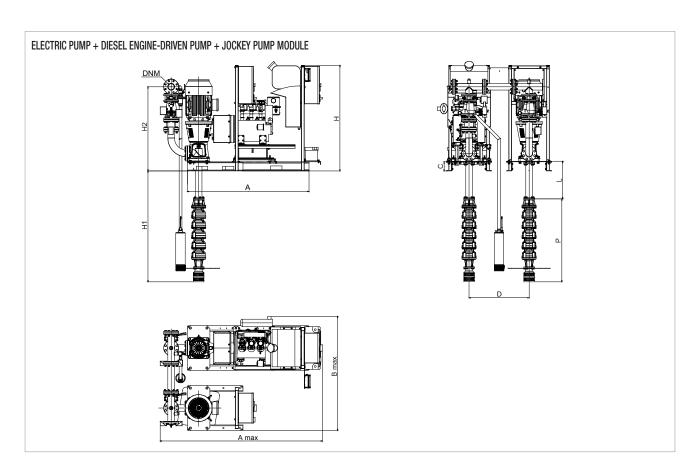
KVT EN 12845 ELECTRIC PUMP

MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In A	MEASURING KIT
			kW	kW		
1KVT6 23/4 11 400/50	3 x 400 V	DIVER 150 T	11	1.0	19.4	FLOW METER DN80

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA Fan	DIESEL COLLECTION TANK
1KVT6 23/4 11 MD	1 x 220-240 V	DIVER 150 T	11	1.0	0.22 m ²	20 I included

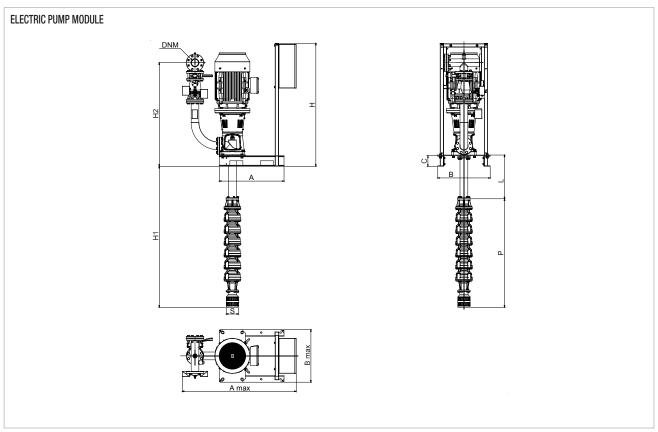
^{*} Jockey pump on request.

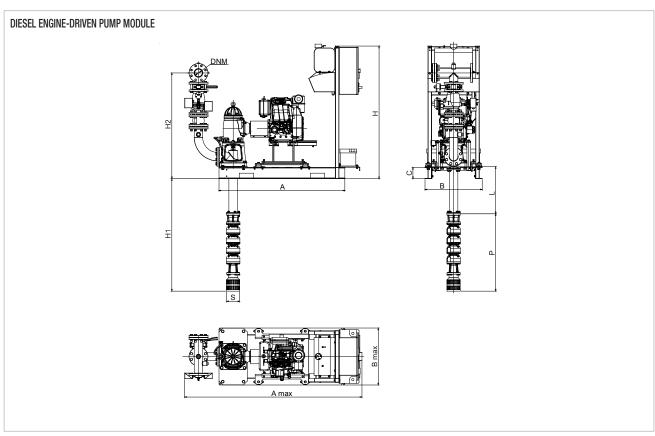




 $^{^{\}star\star}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

1KVT6 23/4 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS



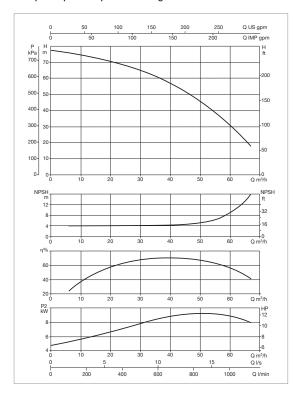


MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	НЗ	DNM
1KVT6 23/4 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1330	1934		1602	120	1406	1183	820		2000	2700				80
1KVT6 23/4 11 400/50 - ELECTRIC PUMP MODULE	740	1305	599	599	120	1406	1183	820	Ø 140	2000	2700				80
1KVT6 23/4 11 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1330	1934	603	603	120	1406	1183	820	Ø 140	2000	2700	-	-	-	80



1KVT6 23/5 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS

Pumped liquid temperature range: from 0 $^{\circ}$ C to +40 $^{\circ}$ C - Ambient temperature range: from +4 $^{\circ}$ C to +40 $^{\circ}$ C



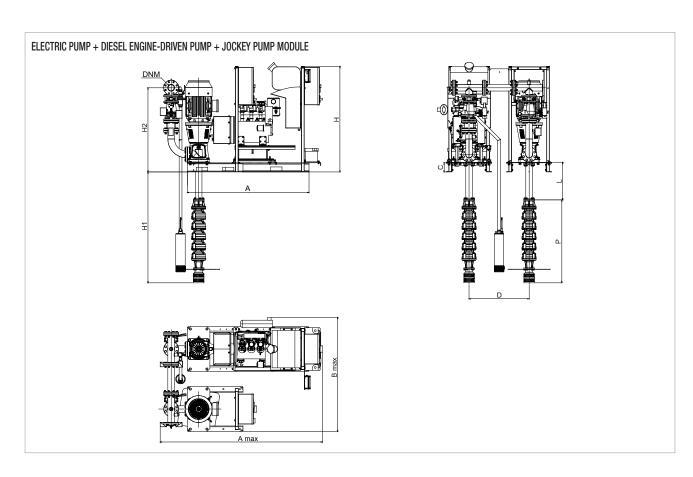
KVT EN 12845 ELECTRIC PUMP

MODEL	POWER INPUT	POWER INPUT JOCKEY PUMP*		P2 JOCKEY PUMP	In Δ	MEASURING KIT
		1 01111	kW	kW	Α	IUI
1KVT6 23/5 11 400/50	3 x 400 V	DIVER 150 T	11	1.0	19.4	FLOW METER DN80

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA FAN	DIESEL COLLECTION TANK
1KVT6 23/5 15 MD	1 x 220-240 V	DIVER 150 T	15	1.0	0.22 m ²	50 I included

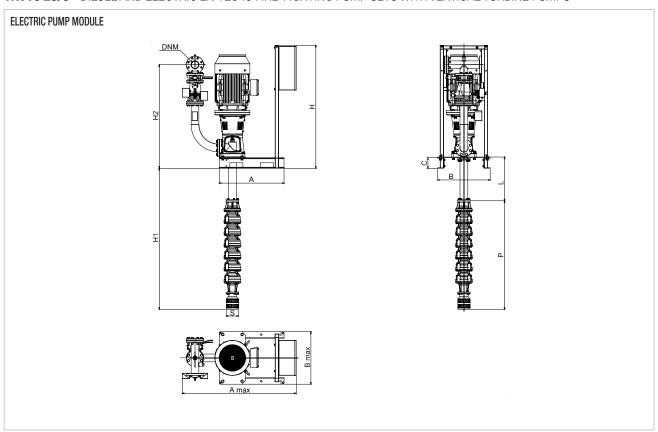
^{*} Jockey pump on request.

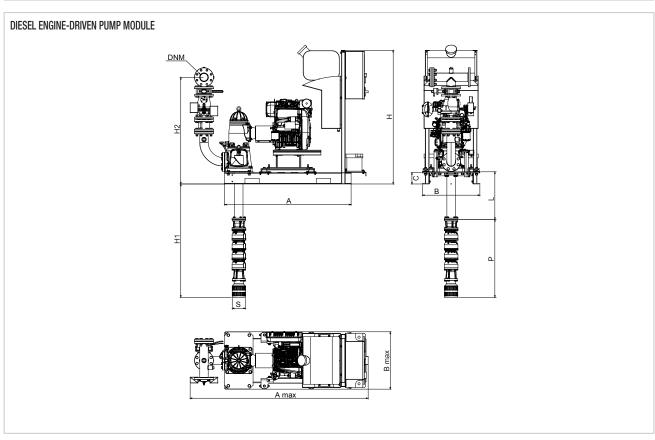




 $^{^{\}star\star}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

1KVT6 23/5 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS



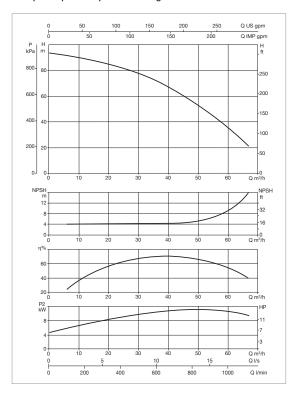


MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	НЗ	DNM
1KVT6 23/5 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1330	1872		1602	120	1406	1183	922		2000	2802				80
1KVT6 23/5 11 400/50 - ELECTRIC PUMP MODULE	740	1305	599	599	120	1406	1183	922	Ø 140	2000	2802				80
1KVT6 23/5 15 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1330	1872	603	603	120	1406	1121	922	Ø 140	2000	2802	-	-	-	80



1KVT6 23/6 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS

Pumped liquid temperature range: from 0 $^{\circ}$ C to +40 $^{\circ}$ C - Ambient temperature range: from +4 $^{\circ}$ C to +40 $^{\circ}$ C



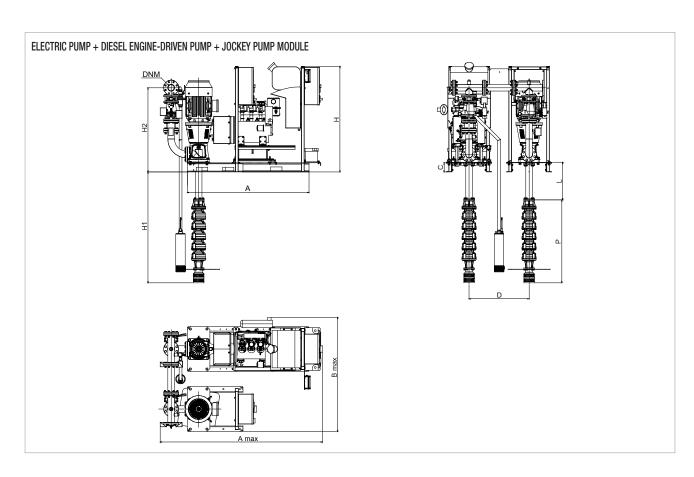
KVT EN 12845 ELECTRIC PUMP

MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In A	MEASURING KIT
		1 OWII	kW	kW	Λ.	MI
1KVT6 23/6 15 400/50	3 x 400 V	DIVER 150 T	15	1.0	26.5	FLOW METER DN80

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA Fan	DIESEL COLLECTION TANK
1KVT6 23/6 15 MD	1 x 220-240 V	DIVER 150 T	15	1.0	0.22 m ²	50 I included

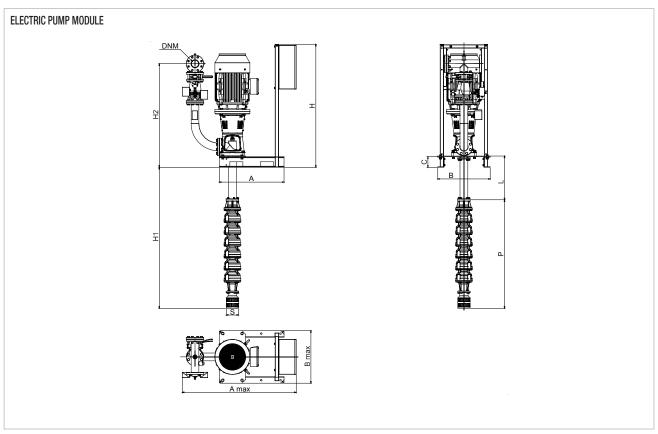
^{*} Jockey pump on request.

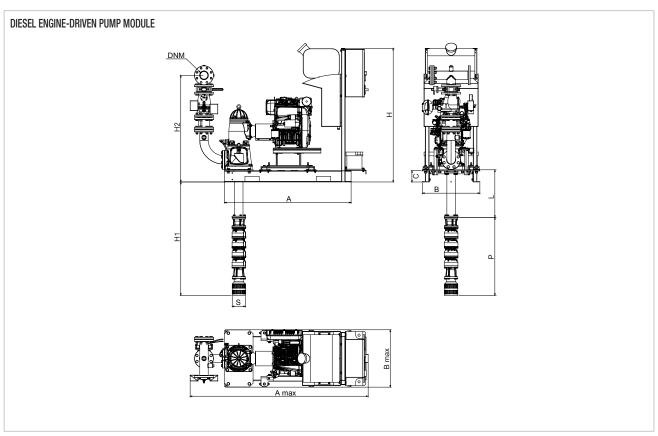




 $^{^{\}star\star}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

1KVT6 23/6 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS



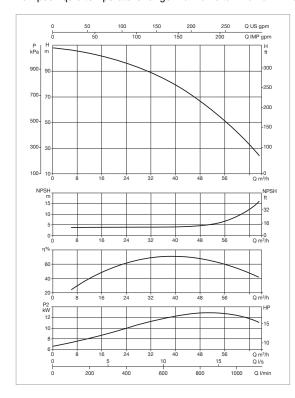


MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	Н3	DNM
1KVT6 23/6 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1330	1872		1602	120	1406	1183	820		2000	2700				80
1KVT6 23/6 15 400/50 - ELECTRIC PUMP MODULE	740	1334	599	599	120	1406	1183	1025	Ø 140	2000	2905				80
1KVT6 23/6 15 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1330	1872	603	603	120	1406	1121	820	Ø 140	2000	2700	-	-	-	80



1KVT6 23/7 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS

Pumped liquid temperature range: from 0 $^{\circ}$ C to +40 $^{\circ}$ C - Ambient temperature range: from +4 $^{\circ}$ C to +40 $^{\circ}$ C



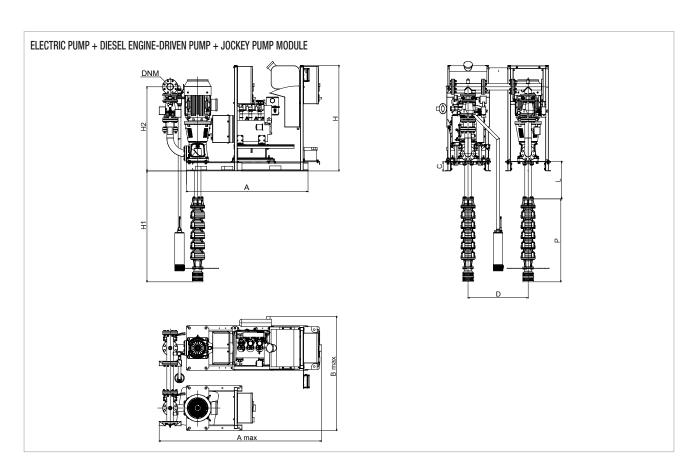
KVT EN 12845 ELECTRIC PUMP

MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In ^	MEASURING KIT
		I OWII	kW	kW	Α	MI
1KVT6 23/7 18,5 400/50	3 x 400 V	DIVER 200 T	18.5	1.5	32.0	FLOW METER DN80

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL Engine- Driven Pump kw	P2 JOCKEY PUMP kW	AREA Fan	DIESEL COLLECTION TANK
1KVT6 23/7 19 MD	1 x 220-240 V	DIVER 200 T	19	1.5	0.22 m ²	50 I included

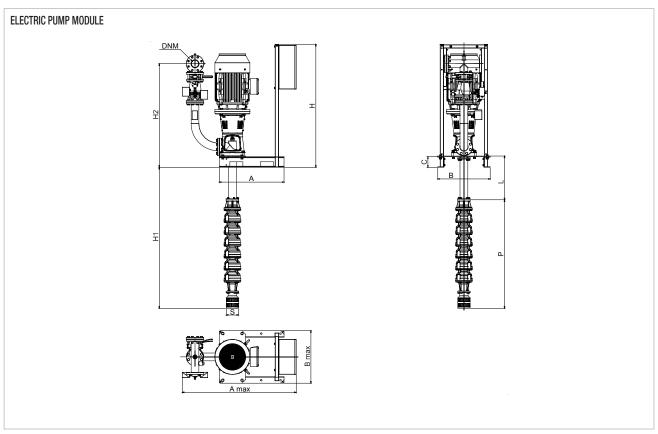
^{*} Jockey pump on request.

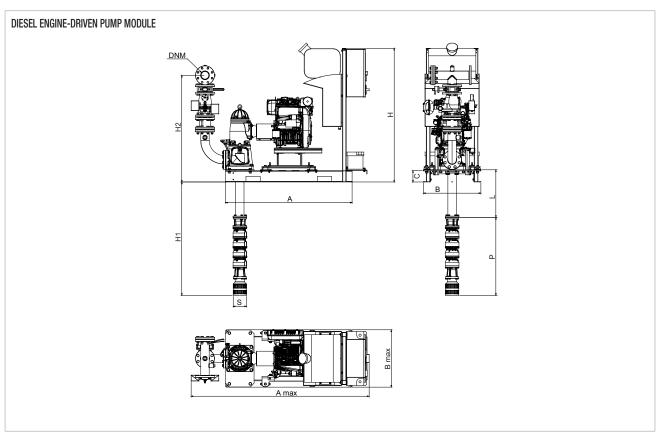




 $^{^{\}star\star}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

1KVT6 23/7 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS



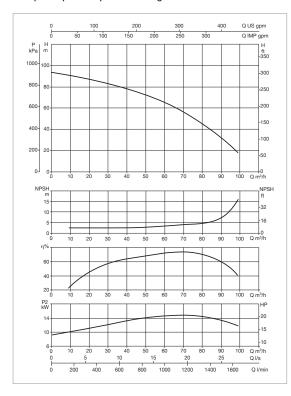


MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	НЗ	DNM
1KVT6 23/7 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1620	2162		1637	120	1406	1183	1127		2000	3007				80
1KVT6 23/7 30 18.5 400/50 - ELECTRIC PUMP MODULE	740	1337	599	599	120	1406	1183	1127	Ø 140	2000	3007				80
1KVT6 23/7 19 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1620	2162	595	638	120	1406	1121	1127	Ø 140	2000	3007	-	-	-	80



1KVT8 13N/4 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS

Pumped liquid temperature range: from 0 $^{\circ}$ C to +40 $^{\circ}$ C - Ambient temperature range: from +4 $^{\circ}$ C to +40 $^{\circ}$ C



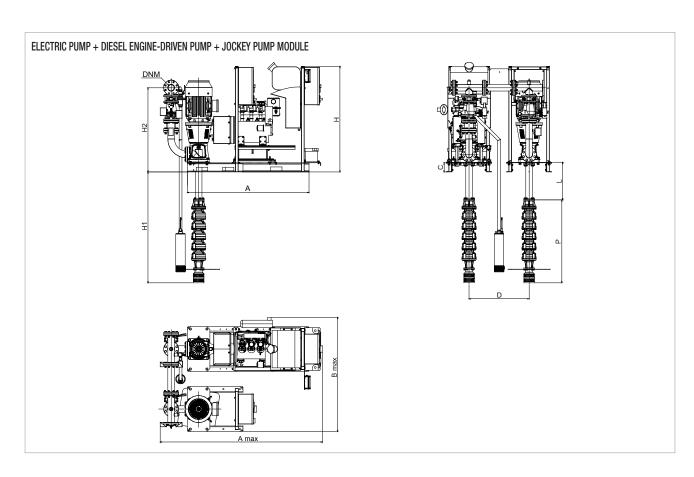
KVT EN 12845 ELECTRIC PUMP

MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In Δ	MEASURING KIT
		1 OWII	kW	kW	Λ.	IMI
1KVT8 13N/4 18.5 400/50	3 x 400 V	DIVER 200 T	18.5	1.5	32.0	FLOW METER DN80

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA FAN	DIESEL COLLECTION TANK
1KVT8 13N/4 19 MD	1 x 220-240 V	DIVER 200 T	19	1.5	0.22 m ²	50 I included

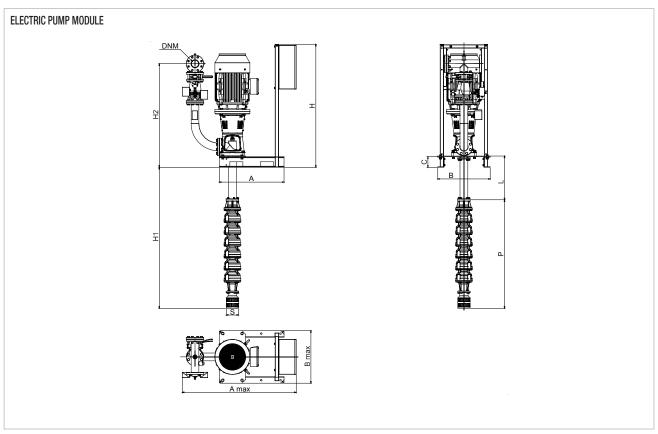
^{*}Jockey pump on request.

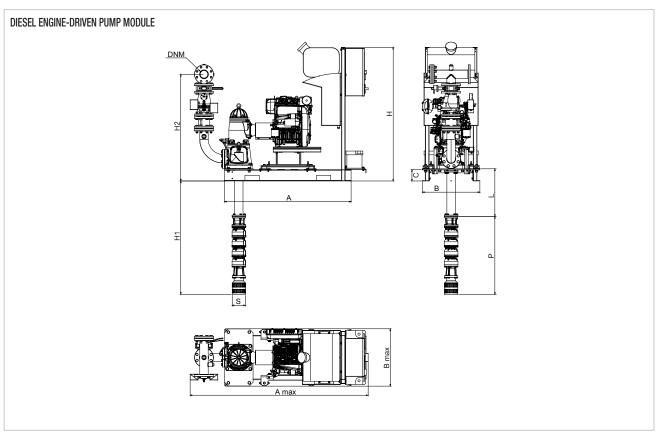




^{**} ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

1KVT8 13N/4 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS



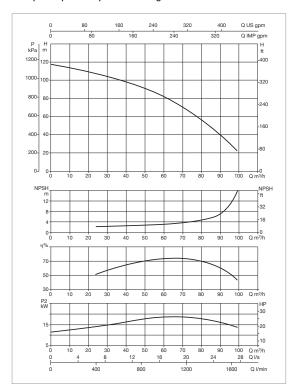


MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	Н3	DNM
1KVT8 13N/4 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1620	2162		1637	120	1406	1183	968		2000	2848				80
1KVT8 13N/4 30 18.5 400/50 - ELECTRIC PUMP MODULE	740	1337	599	599	120	1406	1183	968	Ø 140	2000	2848				80
1KVT8 13N/4 19 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1620	2162	595	638	120	1406	1121	968	Ø 140	2000	2848	-	-	-	80



1KVT8 13N/5 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS

Pumped liquid temperature range: from 0 $^{\circ}$ C to +40 $^{\circ}$ C - Ambient temperature range: from +4 $^{\circ}$ C to +40 $^{\circ}$ C



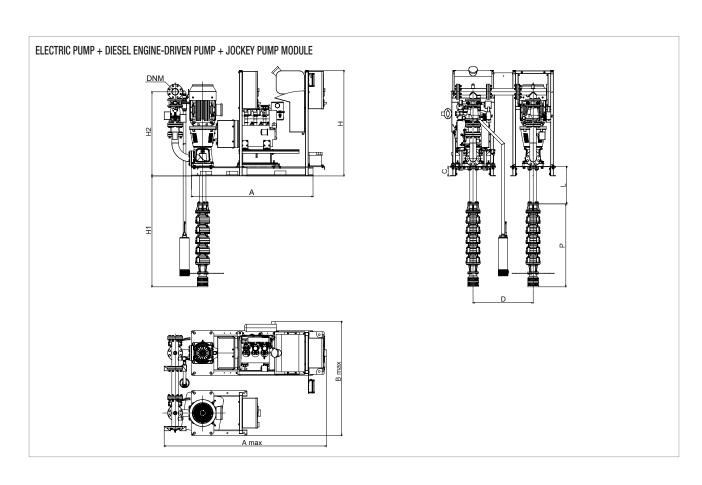
KVT EN 12845 ELECTRIC PUMP

MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In A	MEASURING KIT
		1 OWII	kW	kW	Λ.	IMI
1KVT8 13N/5 22 400/50	3 x 400 V	DIVER 200 T	22	1.5	38.0	FLOW METER DN80

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL Engine- Driven Pump kw	P2 JOCKEY PUMP kW	AREA Fan	DIESEL COLLECTION TANK
1KVT8 13N/5 26 MD	1 x 220-240 V	DIVER 200 T	26	1.5	0.22 m ²	50 I included

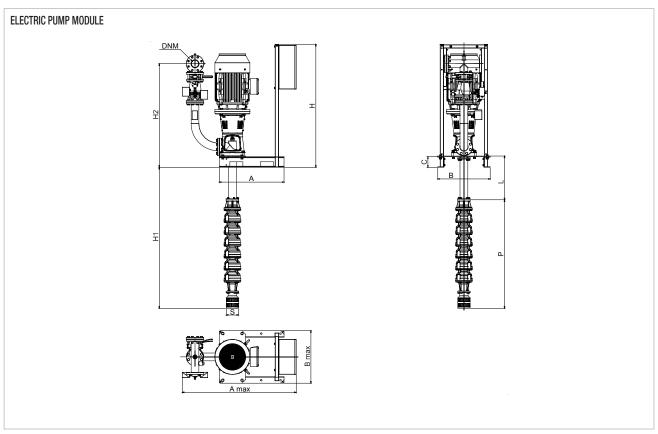
^{*}Jockey pump on request.

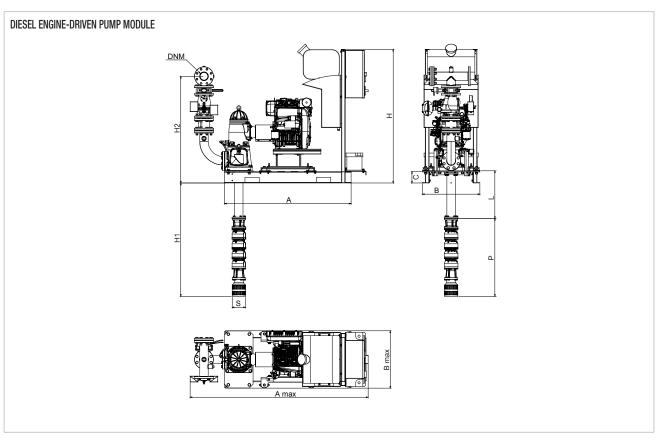




^{**}ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

1KVT8 13N/5 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS



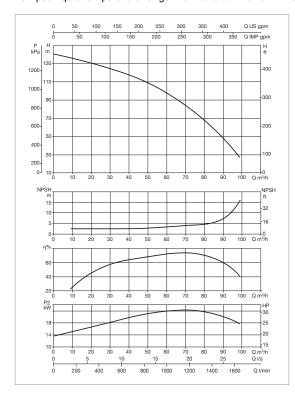


MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	Н3	DNM
1KVT8 13N/5 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1620	2162		1721	120	1406	1183	1104		2000	2984				80
1KVT8 13N/5 22 400/50 - ELECTRIC PUMP MODULE	740	1337	599	599	120	1406	1183	1104	Ø 140	2000	2984				80
1KVT8 13N/5 26 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1620	2162	595	722	120	1406	1121	1104	Ø 140	2000	2984	-	-	-	80



1KVT8 13N/6 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS

Pumped liquid temperature range: from 0 $^{\circ}$ C to +40 $^{\circ}$ C - Ambient temperature range: from +4 $^{\circ}$ C to +40 $^{\circ}$ C



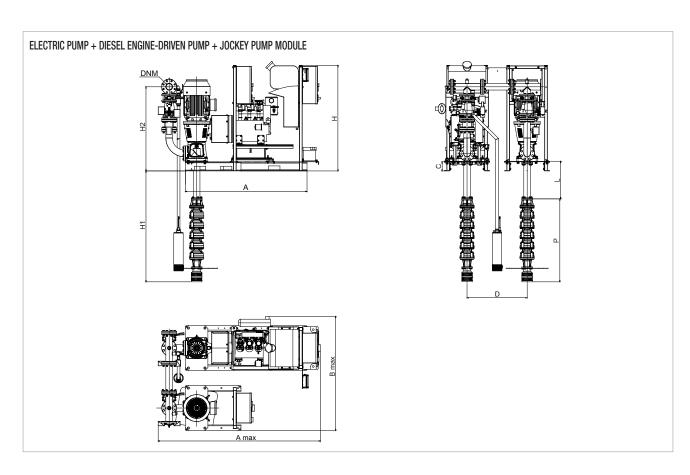
KVT EN 12845 ELECTRIC PUMP

MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In Δ	MEASURING KIT
		1 01111	kW	kW	Α	INI
1KVT8 13N/6 30 400/50	3 x 400 V	DIVER 200 T	30	1.5	52.0	FLOW METER DN80

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA FAN	DIESEL COLLECTION TANK
1KVT8 13N/6 37 MD	1 x 220-240 V	DIVER 200 T	37	1.5	0.40 m ²	125 I accessories

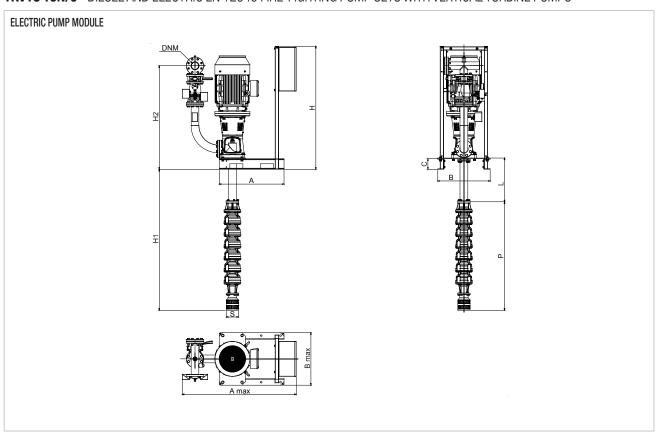
^{*} Jockey pump on request.

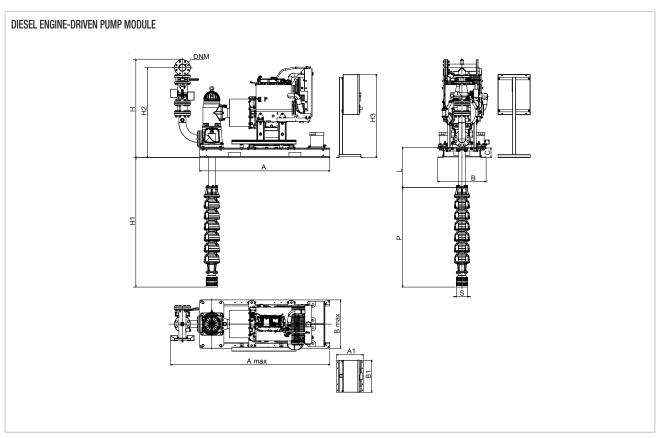




 $^{^{**}}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

1KVT8 13N/6 - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS



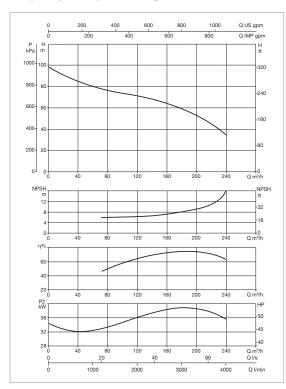


MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	Н3	DNM
1KVT8 13N/6 - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1620	1982		1601	140	1406	1183	1240		2000	3100				80
1KVT8 13N/6 30 400/50 - ELECTRIC PUMP MODULE	740	1304	599	599	120	1406	1183	1240	Ø 140	2000	3120				80
1KVT8 13N/6 37 MD - DIESEL ENGINE-DRIVEN PUMP MODULE	1620	1982	602	602	140	1241	1135	1240	Ø 140	2000	3100	335	400	1037	80



1KVT10 15N/2A - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS

Pumped liquid temperature range: from 0 $^{\circ}$ C to +40 $^{\circ}$ C - Ambient temperature range: from +4 $^{\circ}$ C to +40 $^{\circ}$ C



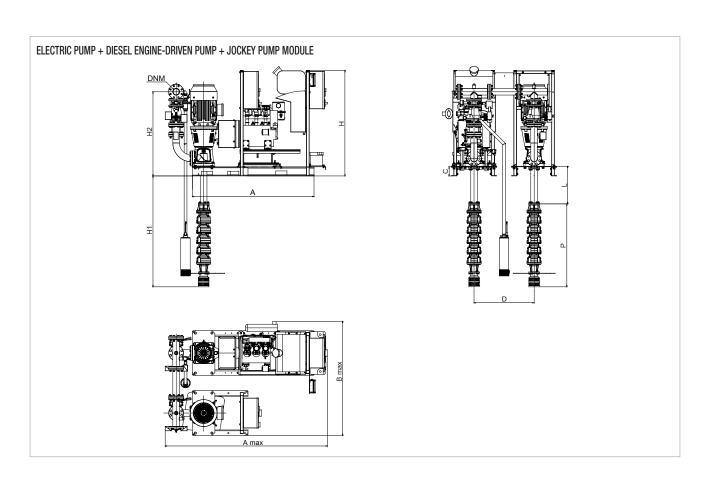
KVT EN 12845 ELECTRIC PUMP

MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In ^	MEASURING KIT
		I OWII	kW	kW	Α	MI
1KVT10 15N/2A 45 400/50	3 x 400 V	DIVER 200 T	45	1.5	76.0	FLOW METER DN125

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA FAN	DIESEL COLLECTION TANK
1KVT10 15N/2A 53 MD EN	1 x 220-240 V	DIVER 200 T	53	1.5	0.40 m ²	125 I accessories

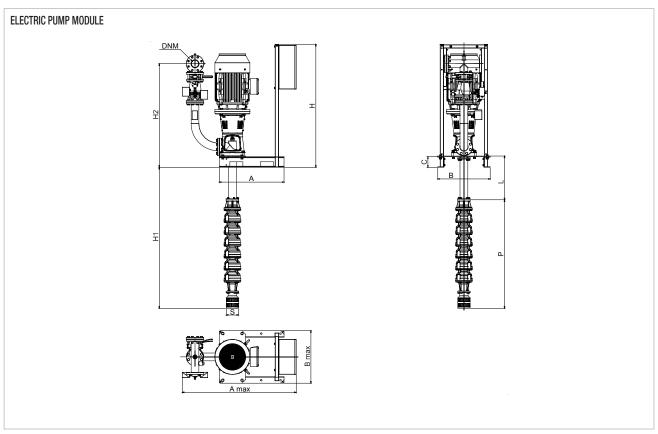
^{*} Jockey pump on request.

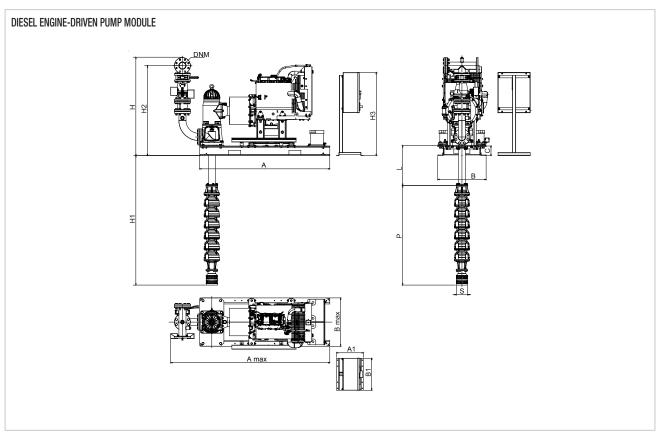




 $^{^{**}}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

1KVT10 15N/2A - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS



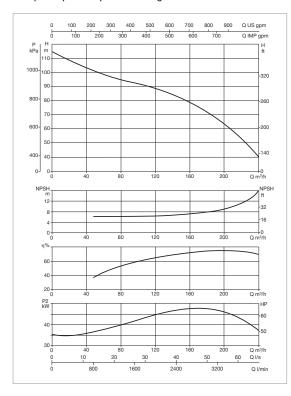


MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	Н3	DNM
1KVT10 15N/2A - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1620	2122		1864	140	1600	1534	1038		2000	2898				125
1KVT10 15N/2A 45 400/50 - ELECTRIC PUMP MODULE	1184	1914	730	730	140	1600	1534	1038	Ø 214	2000	2898				125
1KVT10 15N/2A 53 400/50 - DIESEL ENGINE-DRIVEN PUMP MODULE	1620	2122	602	634	140	1596	1465	1038	0 214	2000	2898	335	400	1037	125



1KVT10 15N/3CD - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS

Pumped liquid temperature range: from 0 $^{\circ}$ C to +40 $^{\circ}$ C - Ambient temperature range: from +4 $^{\circ}$ C to +40 $^{\circ}$ C



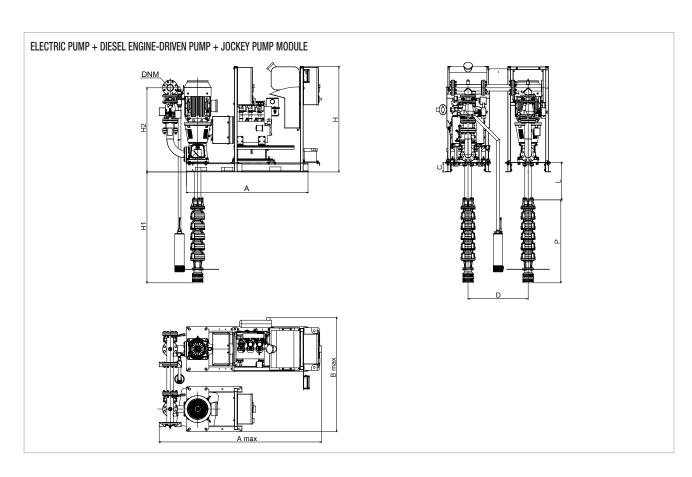
KVT EN 12845 ELECTRIC PUMP

MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In A	MEASURING KIT
		1 OWN	kW	kW		MI
1KVT10 15N/3CD 55 400/50	3 x 400 V	DIVER 200 T	55	1.5	95.0	FLOW METER DN125

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA FAN	DIESEL COLLECTION TANK
1KVT10 15N/3CD 73,5 MD EN	1 x 220-240 V	DIVER 200 T	73.5	1.5	0.40 m ²	125 I accessories

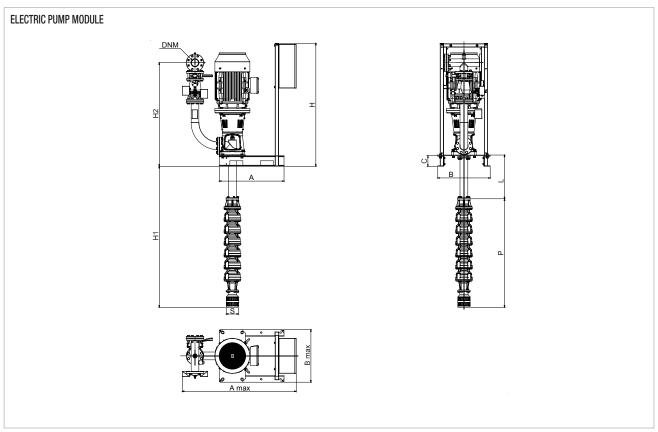
^{*} Jockey pump on request.

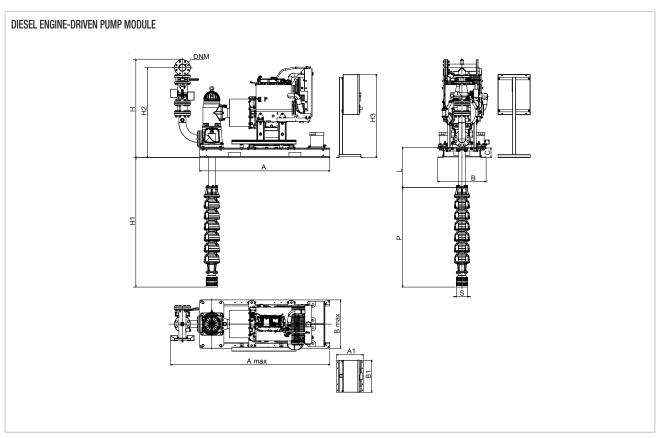




 $^{^{**}}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

1KVT10 15N/3CD - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS



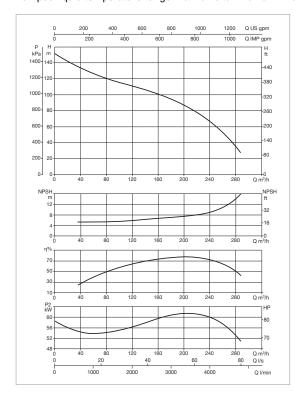


MODEL	A	A max	В	B max	С	Н	H2	Р	S	L	H1	A1	B1	Н3	DNM
1KVT10 15N/3CD - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1620	2153		1987	140	1600	1534	1218		2000	3078				125
1KVT10 15N/3CD 55 400/50 - ELECTRIC PUMP MODULE	1140	1871	730	730	140	1600	1534	1218	Ø 214	2000	3078				125
1KVT10 15N/3CD 73,5 400/50 - DIESEL ENGINE-DRIVEN PUMP MODULE	1620	2153	725	757	140	1596	1465	1218	0 214	2000	3078	335	400	1037	125



1KVT10 26N/3A - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS

Pumped liquid temperature range: from 0 $^{\circ}$ C to +40 $^{\circ}$ C - Ambient temperature range: from +4 $^{\circ}$ C to +40 $^{\circ}$ C



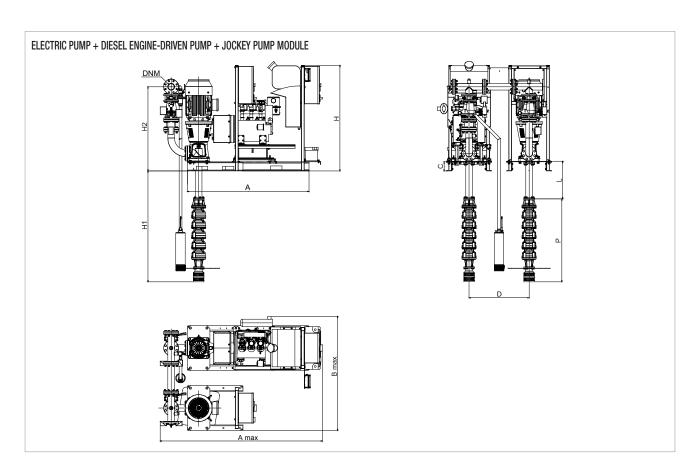
KVT EN 12845 ELECTRIC PUMP

MODEL	POWER INPUT	JOCKEY PUMP*	P2 MAIN PUMP	P2 JOCKEY PUMP	In A	MEASURING KIT
		1 OWII	kW	kW		MI
1KVT10 26N/3A 75 400/50	3 x 400 V	DIVER 200 T	75	1.5	124.0	FLOW METER DN125

KVT EN 12845 DIESEL ENGINE-DRIVEN PUMP

MODEL	BATTERY CHARGER POWER INPUT	JOCKEY	** P2 DIESEL ENGINE- DRIVEN PUMP kW	P2 JOCKEY PUMP kW	AREA FAN	DIESEL COLLECTION TANK
1KVT10 26N/3A 73,5 MD EN	1 x 220-240 V	DIVER 200 T	73.5	1.5	0.40 m ²	125 I accessories

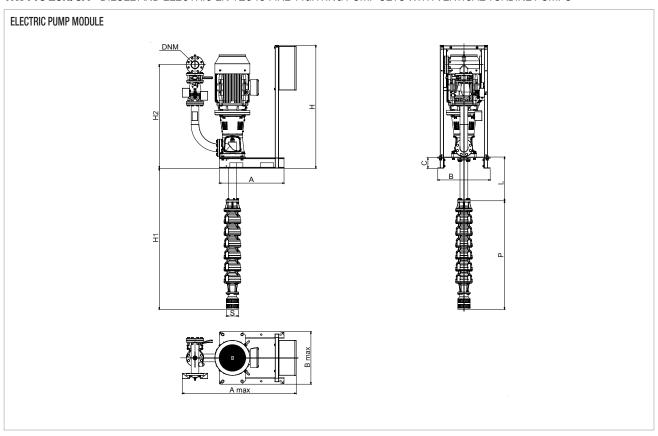
^{*} Jockey pump on request.

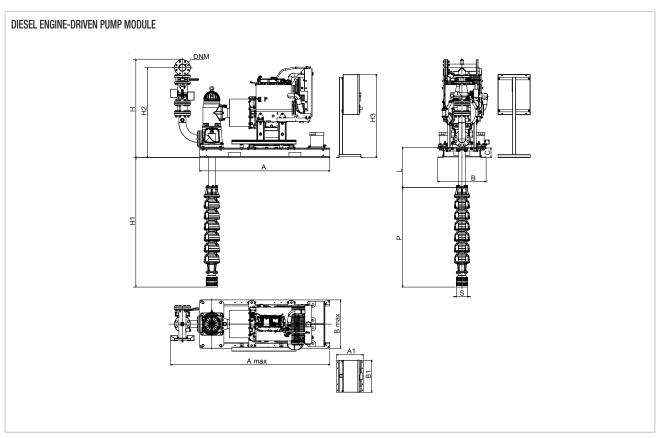




 $^{^{**}}$ ISO 3046 continuous power The motor is capable of delivering 10 % more of the power requested by the pump.

1KVT10 26N/3A - DIESEL AND ELECTRIC EN 12845 FIRE-FIGHTING PUMP SETS WITH VERTICAL TURBINE PUMPS

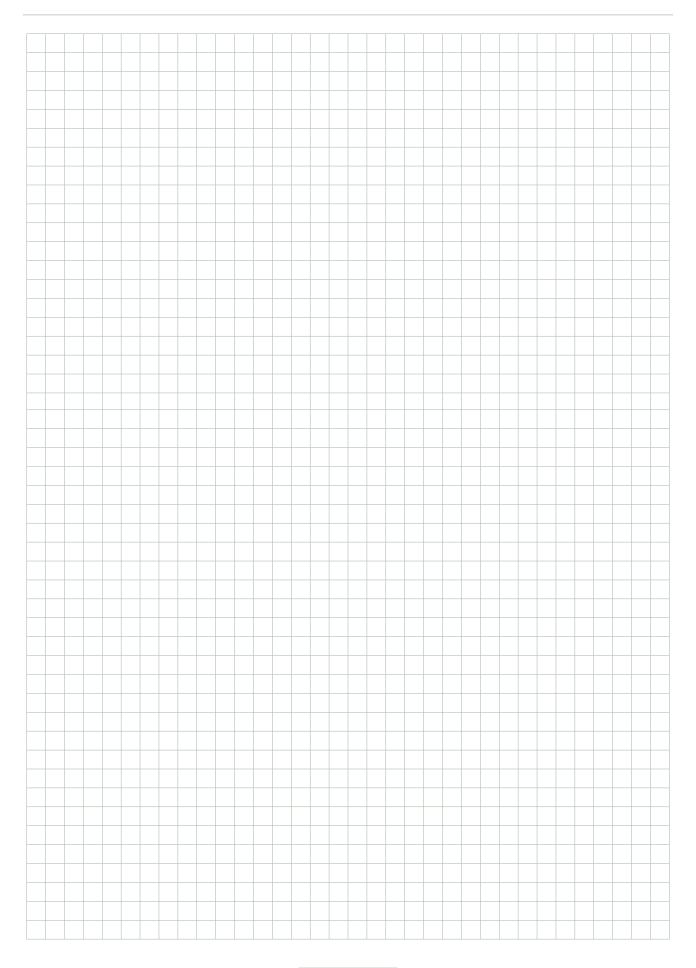




MODEL	A	A max	В	B max	С	Н	Н2	P	S	L	H1	A1	B1	НЗ	DNM
1KVT10 26N/3A - ELECTRIC PUMP + DIESEL ENGINE-DRIVEN PUMP + JOCKEY PUMP MODULE	1620	2243		1957	140	1762	1702	1197		2000	3057				150
1KVT10 26N/3A 75 400/50 - ELECTRIC PUMP MODULE	1140	2036	730	730	140	1600	1702	1197	0 214	2000	3057				150
1KVT10 26N/3A 73,5 400/50 - DIESEL ENGINE-DRIVEN PUMP MODULE	1620	2243	725	727	140	1762	1617	1197	0 214	2000	3057	335	400	1037	150



NOTES







Via Marco Polo, 14 - 35035 Mestrino (PD) Italy - Tel. +39.049.5125000 - Fax +39.049.5125950

www.dabpumps.com



On-line product selection





DAB PUMPS LTD.

Unit 4 and 5. Stortford Hall Industrial Park. Dunmow Road, Bishops Stortford, Herts CM23 5GZ - UK salesuk@dwtgroup.com Tel. +44 1279 652 776 Fax +44 1279 657 727

DAB PUMPS B.V.

Brusselstraat 150 B-1702 Groot-Bijgaarden - Belgium info.belgium@dwtgroup.com Tel. +32 2 4668353 Fax +32 2 4669218

DAB PUMPS B.V.

Albert Einsteinweg, 4 5151 DL Drunen - Nederland info.netherlands@dwtgroup.com Tel. +31 416 387280 Fax +31 416 387299

DAB PUMPEN DEUTSCHLAND GmbH

D - 47918 Tönisvorst - Germany info.germany@dwtgroup.com Tel. +49 2151 82136-0 Fax +49 2151 82136-36

DAB PUMPS IBERICA S.L.

Avenida de Castilla nr.1 Local 14 28830 - San Fernando De Henares - Madrid info.spain@dwtgroup.com Tel. +34 91 6569545 Fax: +34 91 6569676

DAB PRODUCTION HUNGARY KFT.

H-8800 Nagykanizsa, Buda Ernó u.5 Hungary Tel. +36 93501700

DAB PUMPS POLAND Sp. z o.o.

Mokotów Marynarska ul. Postępu 15C 02-676 Warszawa - Poland polska@dabpumps.com.pl Tel. +48 223 816 085

DAB UKRAINE Representative Office

Regus Horizon Park 4 M. Hrinchenka St, suit 147 03680 Kiev - Ukraine Tel. +38 044 391 59 43

000 DAB PUMPS

Novgorodskaya str. 1, block G office 308, 127247, Moscow - Russia info.russia@dwtgroup.com Tel. +7 495 122 0035 Fax +7 495 122 0036

3226 Benchmark Drive Ladson, SC 29456 - USA info.usa@dwtgroup.com Tel. 1-843-824-6332 Toll Free 1-866-896-4DAB (4322) Fax 1-843-797-3366

DWT SOUTH AFRICA

Podium at Menlyn, 3rd Floor, Unit 3001b, 43 Ingersol Road, C/O Lois and Atterbury street, Menlyn, Pretoria, 0181 - South-Africa info.sa@dwtgroup.com Tel. +27 12 361 3997 Fax +27 12 361 3137

DAB PUMPS CHINA

No.40 Kaituo Road, Qingdao Economic & Technological **Development Zone** Qingdao City, Shandong Province - China info.china@dwtgroup.com Tel. +8653286812030-6270 Fax +8653286812210

DAB PUMPS DE MÉXICO, S.A. DE C.V.

Av Gral Álvaro Obregón 270, oficina 355 Hipódromo, Cuauhtémoc 06100 México, D.F. Tel. +52 55 6719 0493

💥 🟸 DAB PUMPS OCEANIA PTY LTD

L1 181 Bay Street - Brighton, Melbourne - VIC 3186 - Australia info.oceania@dwtgroup.com Tel. +61 (03) 9595 3841