

Data sheet

Hydraulic data

| | |
|------------------------------------|--------|
| Minimum efficiency index (MEI) | 0,4 |
| Maximum operating pressure P_N | 10 bar |
| Min. fluid temperature T_{min} | -20 °C |
| Max. fluid temperature T_{max} | 120 °C |
| Min. ambient temperature T_{min} | 0 °C |
| Max. ambient temperature T_{max} | 40 °C |

Motor data

| | |
|----------------------------------|-------------------|
| Mains connection | 3~380 V, 50/60 Hz |
| Motor efficiency class | IE4 |
| Rated power P_2 | 4 kW |
| Rated current I_N | 12 A |
| Rated speed n | 2900 1/min |
| Max. speed n_{max} | 2900 1/min |
| Interference emission | EN 61800-3 |
| Interference immunity | EN 61800-3 |
| Insulation class | F |
| Protection class motor | IP55 |
| Integrated full motor protection | - |
| Threaded cable connection | 1 x M16x1.5 |

Materials

| | |
|--------------|-----------------|
| Pump housing | Cast iron |
| Impeller | PPE/PS-GF30 |
| Shaft | Stainless steel |
| Shaft seal | AQ1EGG |
| Lantern | Cast iron |

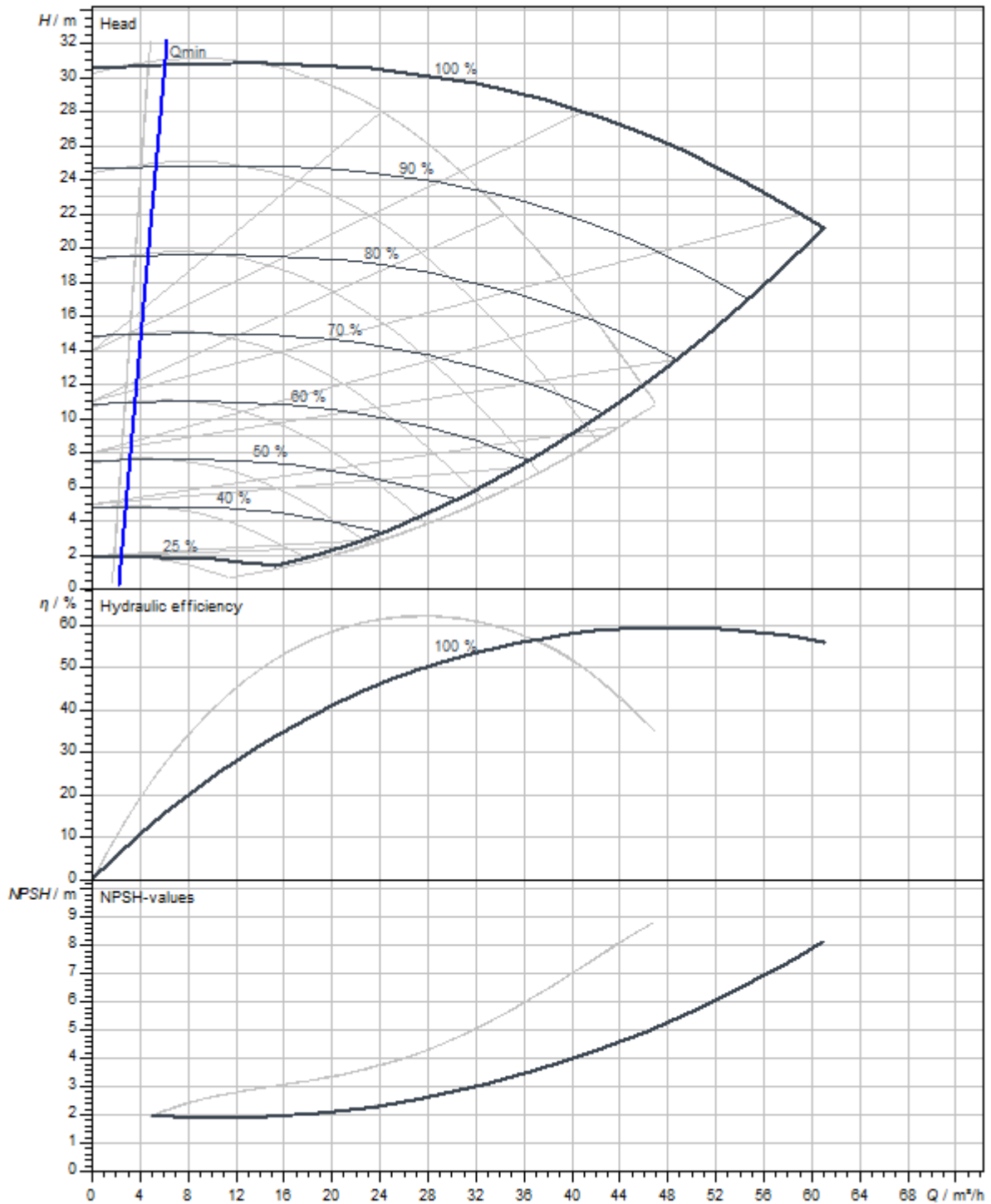
Approved liquids (other liquids upon request)

| | |
|-------------------------------------------------------------------------------------|--------------------------------------|
| Heating water (as per VDI 2035) | yes |
| Heat carrier oil | Special version at additional charge |
| Cooling and cold water circulation systems | yes |
| Water-glycol mixtures (at 20 - 40 vol. % glycol and fluid temperature ≤ 40 °C) | yes |

Installation dimensions

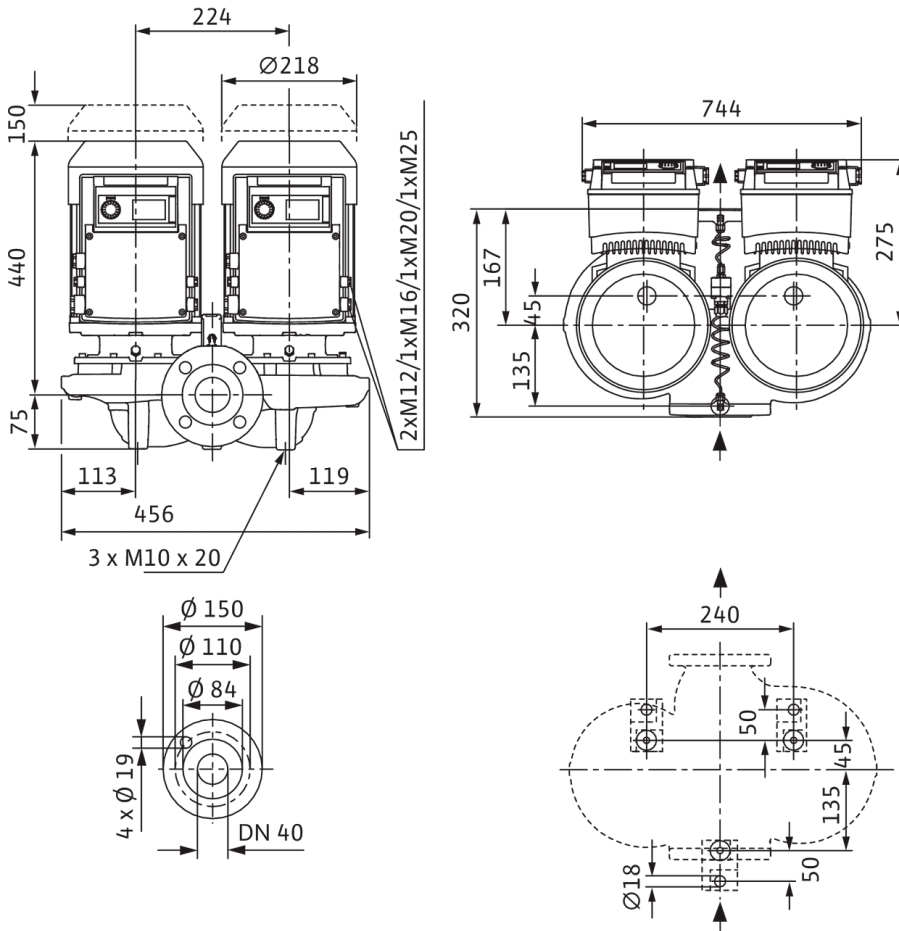
| | |
|---------------------------------------------|--------|
| Port-to-port length L_0 | 320 mm |
| Pipe connection on the suction side DN_s | DN 40 |
| Pipe connection on the pressure side DN_d | DN 40 |

Pump curves



Dimensions and dimensions drawings

VeroTwin-DP-E 40/160-4/2-R1

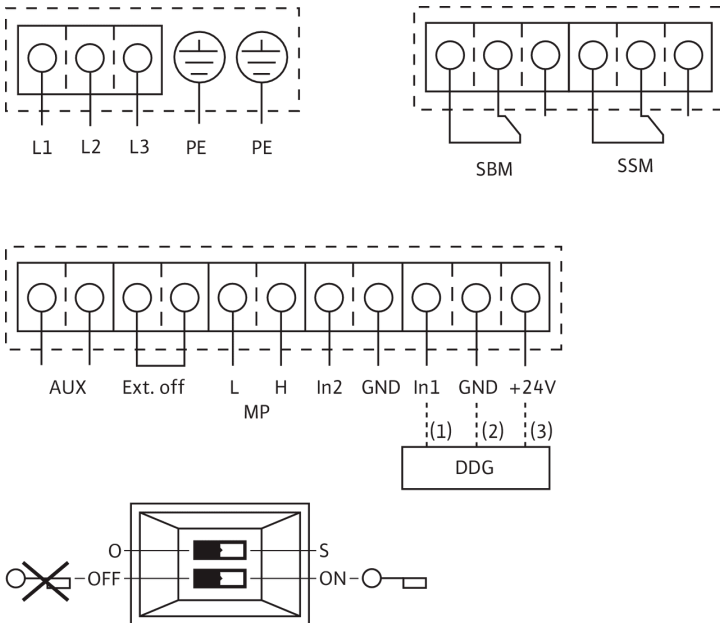


Note:

Housing with feet for installation on a base and drilled holes M10, brackets on request.

Wiring diagram

IL-E



L1, L2, L3: Mains connection: 3~440 V ±10%, 50/60 Hz; 3~400 V ±10%, 50/60 Hz; 3~380 V -5%/+10%, 50/60 Hz

PE: Protective conductor connection

DDG: Connection for differential pressure sensor

In1 (1): Actual value input 0-10 V/0-20 mA; 2-10 V/4-20 mA

GND (2): Ground connection for In1 and In2

+ 24 V (3): DC voltage output for an external consumer/sensor. Max load 60 mA

In2: Setpoint input 0-10 V/0-20 mA; 2-10 V/4-20 mA

MP: Multi-pump, interface for dual pump management

Ext. off: Control input "Overriding Off" The pump can be switched on or off via an external, potential-free contact (24 V DC/10 mA).

SBM:* Potential-free collective run signal (changeover contact according to VDI 3814)

SSM:* Potential-free collective fault signal (changeover contact according to VDI 3814)

aux: External pump cycling (only with dual pump operation). Pump cycling can be performed using an external, potential-free contact (24 VDC/10 mA)

DIP switch: 1: Switchover between operation (O) and service mode (S) 2: Activate/deactivate the menu for access disable

Optional: IF-Modules for connection to the building automation

* Load capacity of contacts for SBM and SSM:

min.: 12 V DC/10 mA

max.: 250 V AC/1 A