

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	1.5 kW
Rated current I_N	5.1 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

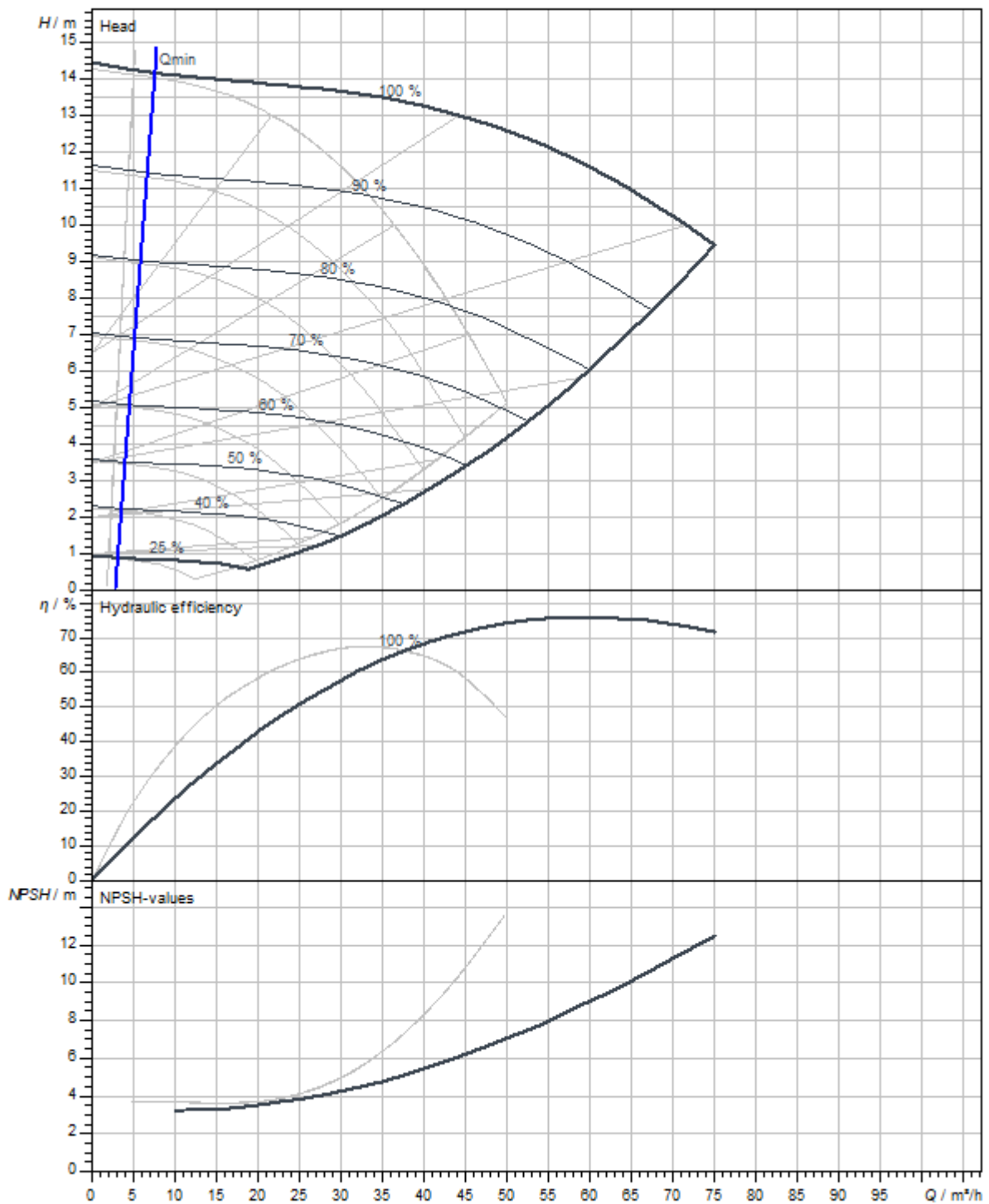
Installation dimensions

Port-to-port length L_0	340 mm
Pipe connection on the suction side DN_s	DN 65
Pipe connection on the pressure side DN_d	DN 65

Operating data

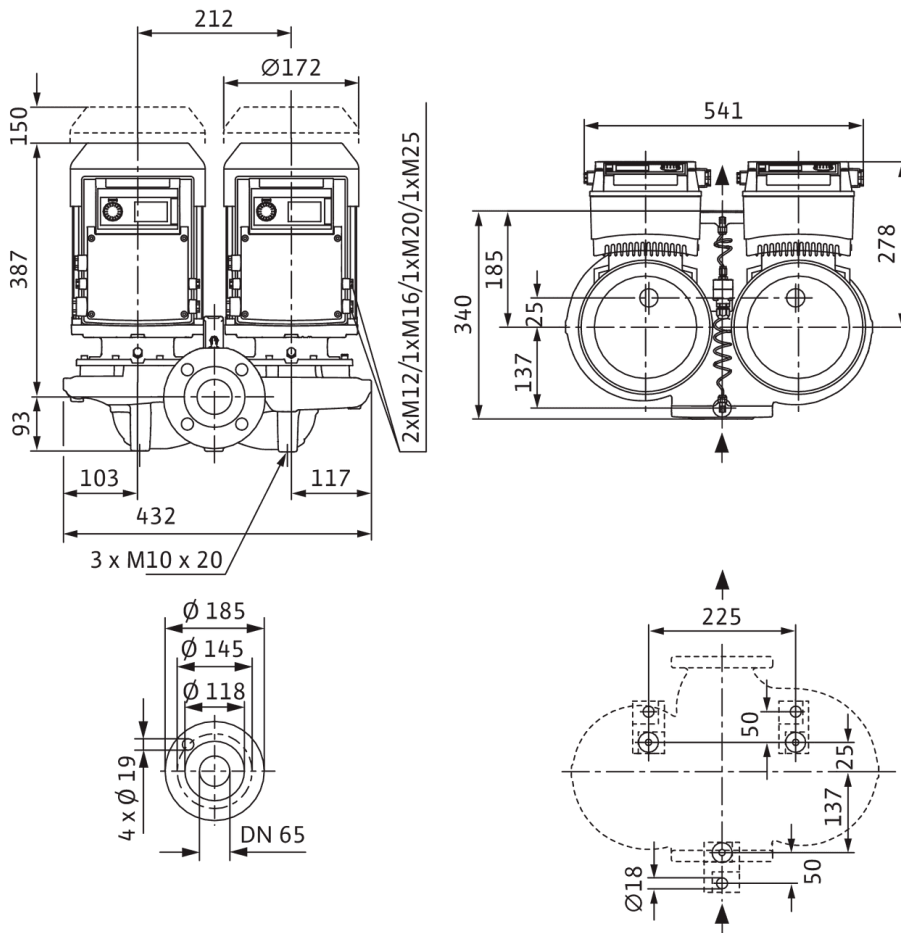
Fluid media	Water
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Pump curves



Dimensions and dimensions drawings

VeroTwin-DP-E 65/115-1,5/2

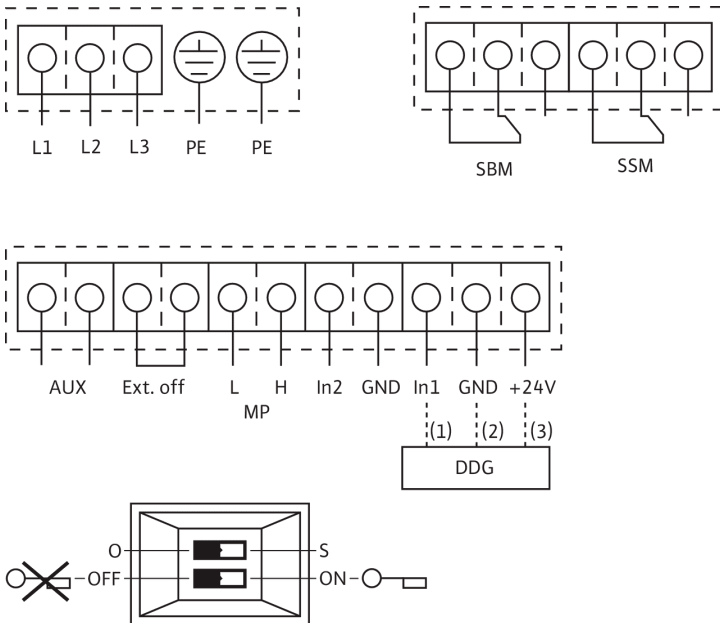


Note:

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

Ordering information

Product data

Brand	Wilo
Product description	VeroTwin-DP-E 65/115-1,5/2
Article number	2158950
EAN number	4048482649191
Colour	Green
Minimum order quantity	1
Date of sales availability	2016-03-01

Dimension, weight

Length with packaging	1200 mm
Length <i>L</i>	479.8 mm
Height with packaging	577 mm
Height <i>H</i>	433 mm
Width with packaging	800 mm
Width <i>W</i>	540 mm
Gross weight, approx. <i>m</i>	105.4 kg
Net weight, approx. <i>m</i>	78 kg

Packaging

Number per layer	1
Packaging property	Transport packaging
Packaging type	One-way pallet
Pieces per pallet	1

Tender text

Glanded twin-head pump with in-line design for pipe installation or installation on a base with built-in frequency converter for electronic control for constant or variable differential pressure ($\Delta p\text{-c}/\Delta p\text{-v}$), among other things. Three-phase AC motor with frequency converter

Design:

- > Single-stage low-pressure centrifugal pump with one-piece shaft
- > Spiral housing, in-line design
- > PN 16 flange – drilled according to EN 1092-2
- > Pressure measuring connections (R 1/8) for mounted differential pressure sensor (version ...-R1 without differential pressure sensor)
- > Pump housing and motor flange with cataphoretic coating as standard
- > Mechanical seal for water feed up to $T=120\text{ °C}$. A glycol admixture of 20 to 40% by vol. is permitted up to $T_{\text{max}} = +40\text{ °C}$. Other mechanical seals or other fluids/temperatures on request.

Accessories:

- > Mounting brackets for fixing to the foundation
- > IR-Monitor
- > IF module PLR
- > IF module LON
- > IF module Modbus
- > IF module BACnet
- > IF module CAN
- > Differential pressure sensor (DDG) sets 0-10 V for pumps in version ...-R1

Standard equipment:

- > One-button manual operation level for:
 - > Pump On/Off
 - > Setpoint and speed adjustment
 - > Selecting the control mode: $\Delta p\text{-c}$ (constant differential pressure), $\Delta p\text{-v}$ (variable differential pressure), PID controller, n-constant (constant speed)
 - > Selection of operating mode in dual pump operation (main/standby operation, parallel operation)
 - > Configuration of operating parameters
 - > Fault acknowledgement
- > Pump display for displaying:
 - > Control mode
 - > Setpoint (e.g. differential pressure or speed)
 - > Error and warning messages
 - > Actual values (e.g. power consumption, actual value of the sensor)
 - > Operating data (e.g. operating hours, energy consumption)
 - > Status data (e.g. status of SSM and SBM relay)
 - > Device data (e.g. pump name)

Additional functions:

- > Interfaces: Control input "Overriding Off", "External pump cycling" (effective only in dual pump operation), analogue input 0–10 V, 2–10 V, 0–20 mA, 4–20 mA for control mode (DDC) or for remote setpoint adjustment, analogue input 0–10 V, 2–10 V, 0–20 mA, 4–20 mA for actual value signal of the pressure sensor, Infrared interface for wireless communication with the operating and service unit Wilo-IR-Stick/IR-Monitor, plug-in position for Wilo IF-Module Modbus, BACnet, CAN, PLR, LON for connecting to the building automation, configurable, potential-free fault and operating/ready message, interface for dual pump communication
- > Adjustable time interval for pump cycling (in dual pump mode)
- > Integrated full motor protection
- > Different operating modes for heating mode (HV) or air-conditioning mode (AC)
- > Access disable
- > Different operation levels: Standard / Service

Operating data

Fluid media	Water
Fluid temperature T	-20 °C
Ambient temperature T	0 °C

Operating data

Maximum operating pressure P_N	10 bar
Minimum efficiency index (MEI)	0.4

Motor data

Motor efficiency class	IE4
Interference emission	EN 61800-3
Interference immunity	EN 61800-3
Mains connection	3~380 V, 50/60 Hz
Rated power P_2	1500 W
Max. speed n_{\max}	2900 1/min
Rated current I_N	5.1 A
Insulation class	F
Protection class motor	IP55
Motor protection	

Materials

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

Installation dimensions

Pipe connection on the suction side DN_s	DN 65
Pipe connection on the pressure side DN_d	DN 65
Port-to-port length L_0	340 mm

Information for order placements

Brand	Wilo
Product description	VeroTwin-DP-E 65/115-1,5/2
Net weight, approx. m	78 kg
Article number	2158950