

## NSCEX 65-160/150/204CC4

### Technical data

Company name  
Contact  
Phone number  
e-mail address

#### Operating data

|   |                           |            |                           |             |
|---|---------------------------|------------|---------------------------|-------------|
| 1 | Pumpe type                | Horizontal | Fluid                     | Water, pure |
| 2 | No. of pumps              | 1          | Operating temperature t A | °C 4        |
| 3 | Nominal flow              | m³/h 0     | pH-value at t A           | 7           |
| 4 | Nominal head              | m 0        | Density at t A            | kg/m³ 1000  |
| 5 | Static head               | m 0        | Vapor pressure at t A     | kPa 100     |
| 6 | Inlet pressure            | kPa 0      | Kin. viscosity at t A     | mm²/s 1.569 |
| 7 | Environmental temperature | °C 20      | Altitude                  | 0           |
| 8 | Available system NPSH     | m 0        |                           |             |

#### Pump data

|    |                       |                   |
|----|-----------------------|-------------------|
| 9  | Product version       | [X] - Hydrovar X+ |
| 10 | Operating speed       |                   |
| 11 | Stages                | 1                 |
| 12 | Max. working pressure | kPa 510.5         |
| 13 | Head H(Q=0)           | m 52              |
| 14 | Power input P1(max)   | kW 16.4           |
| 15 | Total weight          | kg 103.0          |
| 16 | Power input           | kW                |
| 17 | Overall efficiency    | %                 |
| 18 | Shaft power           | kW                |
| 19 | Pump efficiency       | %                 |
| 20 | NPSH 3%               | m                 |
| 21 |                       |                   |

#### Materials

|    |                              |                 |                                              |                                            |
|----|------------------------------|-----------------|----------------------------------------------|--------------------------------------------|
| 22 |                              | Pump            |                                              | Shaft Seal                                 |
| 23 | Volute Casing                | Cast Iron       | Single mechanical seal, without shaft sleeve |                                            |
| 24 | Casing Cover                 | Cast Iron       | eMG12 - Ø22mm                                | BQ7EGG-WA                                  |
| 25 | Impeller                     | Cast Iron       |                                              |                                            |
| 26 | Shaft                        | Stainless steel | 1. Rotating ring                             | Carbon graphite resin impregnated          |
| 27 | Wear ring                    | Stainless steel | 2. Stationary ring                           | SiC, silicon carbide, sintered press. less |
| 28 | Impeller lock nut and washer | Stainless steel | 3. Secondary seal                            | Ethylene propylene rubber (EPDM)           |
| 29 | Impeller key                 | Stainless steel | 4. Springs                                   | CrNiMo - Steel                             |
| 30 | Fill and drain plugs         | Stainless steel | 5. Others                                    | EPDM - WRAS                                |
| 31 |                              |                 | Gaskets of the pump                          | Ethylene propylene rubber (EPDM)           |
| 32 |                              |                 |                                              |                                            |
| 33 |                              |                 |                                              |                                            |
| 34 |                              |                 |                                              |                                            |
| 35 |                              |                 |                                              |                                            |
| 36 |                              |                 |                                              |                                            |
| 37 |                              |                 |                                              |                                            |
| 38 |                              |                 |                                              |                                            |
| 39 |                              |                 |                                              |                                            |
| 40 |                              |                 |                                              |                                            |
| 41 |                              |                 |                                              |                                            |

#### Motor data

|    |                 |                       |                          |                               |
|----|-----------------|-----------------------|--------------------------|-------------------------------|
| 42 | Manufacturer    | Xylem                 | Rated voltage            | 380-480V                      |
| 43 | Specific design | IE5 Three phase motor | Rated current            | 30,2-27,1 A                   |
| 44 | Type            | EXM160B14/4.150DH2    | Motor efficiency @400V % | 4/4: 91.7 3/4: 91.4 2/4: 90.5 |
| 45 | Rated power     | 15 kW                 | Power factor @400V       | 0.81                          |
| 46 | Nominal speed   | 3600 rpm              | Weight                   | kg 69.6                       |
| 47 | Frame size      | 160                   |                          |                               |
| 48 | Size            | D                     |                          |                               |

#### Remarks

|    |  |
|----|--|
| 49 |  |
| 50 |  |
| 50 |  |
| 52 |  |

|         |                         |            |           |             |           |
|---------|-------------------------|------------|-----------|-------------|-----------|
| Project | Xylect-20353178         | Created by |           | Last update | 7/22/2024 |
| Block   | NSCEX 65-160/150/204CC4 | Created on | 7/22/2024 |             |           |

## NSCEX 65-160/150/204CC4

### Performance curve

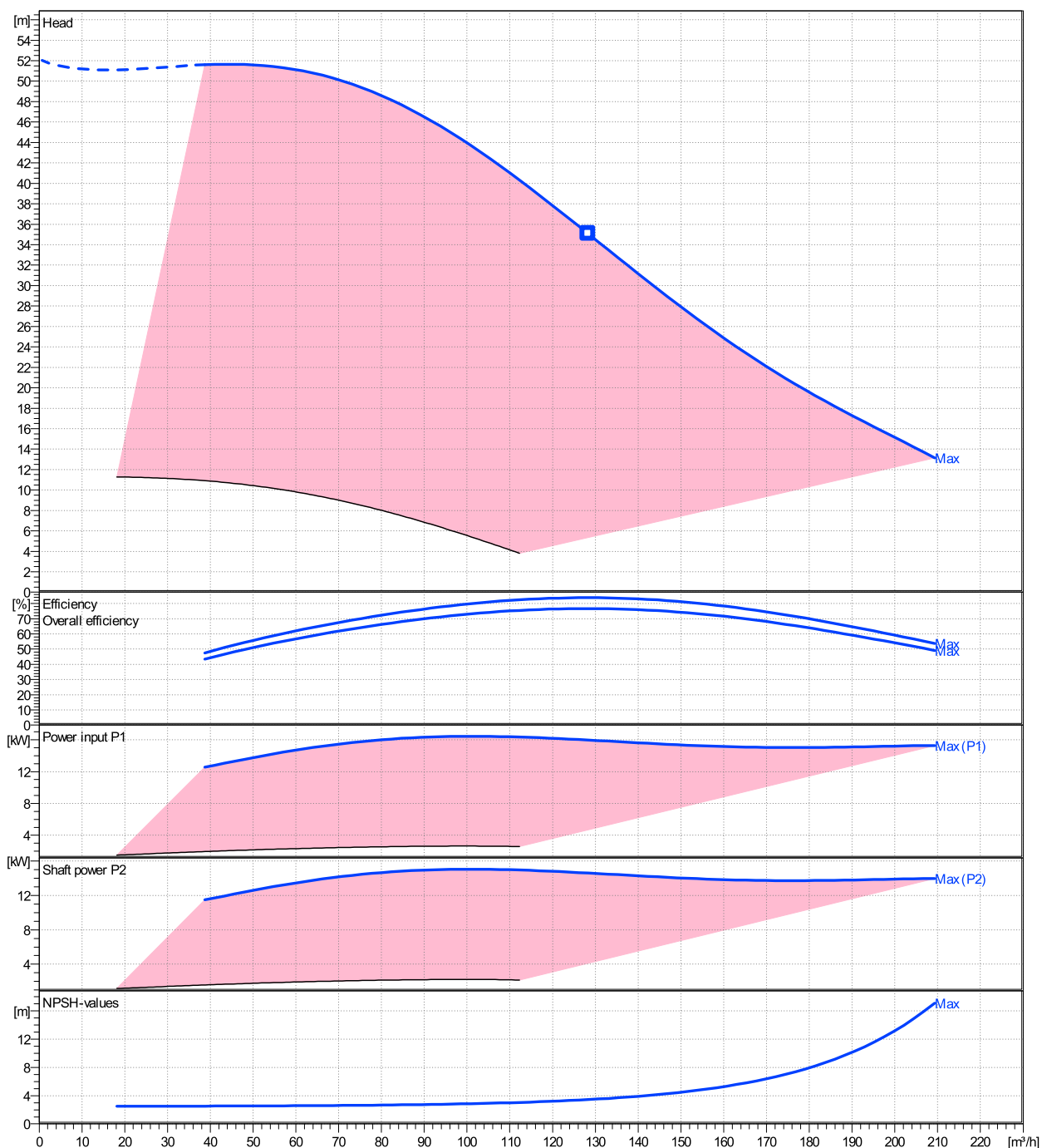
Company name  
Contact  
Phone number  
e-mail address

| Ø    | Pump capacity   |      |      | Pump head |      |  |  |  | Frequency       | Hz   | 50/60 |
|------|-----------------|------|------|-----------|------|--|--|--|-----------------|------|-------|
|      | Operating range | Min. | Max. | H(Q=0)    | η    |  |  |  | Operating speed | rpm  |       |
|      | m³/h            | m³/h | m³/h | m         | m    |  |  |  | Nominal flow    | m³/h | 0     |
| Max. | 38.7            | 209  | 128  | 52        | 35.1 |  |  |  | Nominal head    | m    | 0     |
|      |                 |      |      |           |      |  |  |  | Inlet pressure  | kPa  | 0     |
|      |                 |      |      |           |      |  |  |  | Static head     | m    | 0     |

#### Power datas referred to:

hydr. Performance acceptance acc. To EN ISO 9906 Class 3B

Water, pure [100%] ; 4°C; 1000kg/m³; 1.57mm²/s

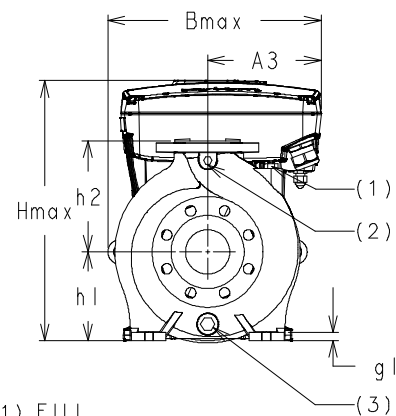
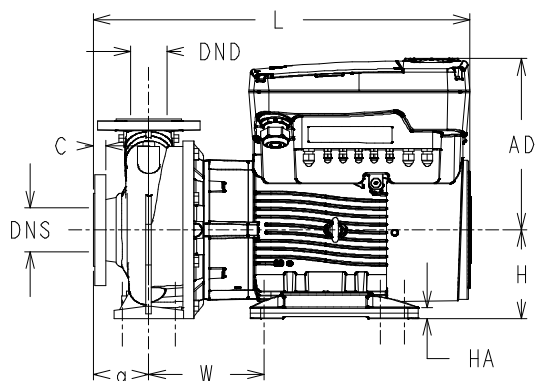


## NSCEX 65-160/150/204CC4

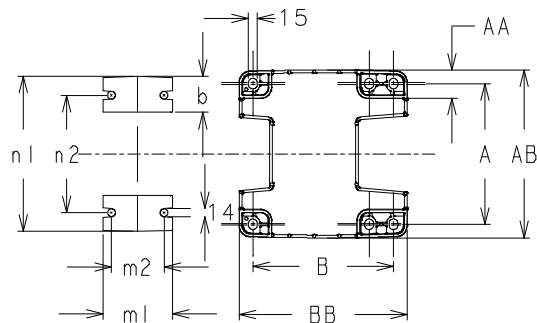
## Dimensions

Company name  
Contact  
Phone number  
e-mail address

[X] - Hydrovar X+  
EXM160B14/4.150DH2



- (1) FILL  
(2) PRESSURE GAUGE CONNECTOR  
(3) DRAIN



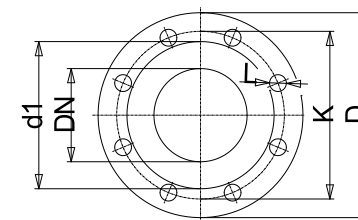
| Dimensions |      |      | [ mm ] |
|------------|------|------|--------|
| (1)        | G1/8 | Hmax | 472    |
| (2)        | G1/4 | L    | 680    |
| (3)        | G3/8 | m1   | 125    |
| a          | 100  | m2   | 95     |
| A          | 254  | n1   | 280    |
| A3         | 205  | n2   | 212    |
| AA         | 59   | Type | B      |
| AB         | 304  | W    | 176    |
| AD         | 312  | x    | 300    |
| B          | 254  |      |        |
| b          | 65   |      |        |
| BB         | 301  |      |        |
| Bmax       | 385  |      |        |
| DND        | 65   |      |        |
| DNS        | 80   |      |        |
| g1         | 16   |      |        |
| H          | 160  |      |        |
| h1         | 160  |      |        |
| h2         | 200  |      |        |
| HA         | 20   |      |        |

### Weight

Total weight 103 kg

### Connections

| EN1092-2 |     | EN1092-2 |     |
|----------|-----|----------|-----|
| DN 80    |     | DN 65    |     |
| PN 16    |     | PN 16    |     |
| C        | 22  | C        | 20  |
| D        | 200 | D        | 185 |
| df       | 132 | df       | 118 |
| DN       | 80  | DN       | 65  |
| K        | 160 | K        | 145 |



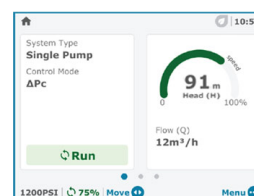
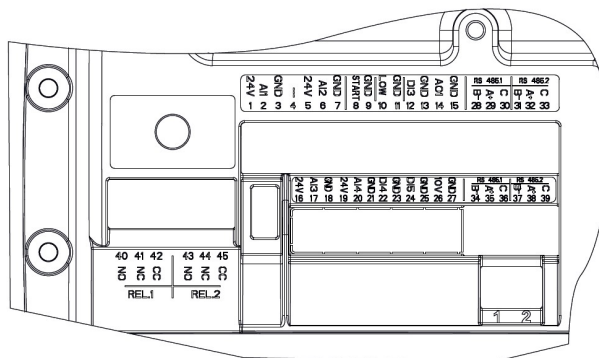
Value C, D may vary from Standard

### Dimensions and weight without obligation

|         |                         |            |           |             |           |
|---------|-------------------------|------------|-----------|-------------|-----------|
| Project | Xylect-20353178         | Created by |           | Last update | 7/22/2024 |
| Block   | NSCEX 65-160/150/204CC4 | Created on | 7/22/2024 |             |           |

**Technical data**

**Company name**  
**Contact**  
**Phone number**  
**e-mail address**



| REF. | ITEM                   | DESCRIPTION                                                                 | DEFAULT           |
|------|------------------------|-----------------------------------------------------------------------------|-------------------|
| 1    | Analog Input 1         | Power supply +24 VDC, max. 60mA (total, terminals 1 + 5)                    | Pressure Sensor 1 |
| 2    |                        | Configurable Analog Input 1                                                 |                   |
| 3    |                        | Electronic GND                                                              |                   |
| 4    | Not used               | Internal use - Do not connect                                               |                   |
| 5    | Analog Input 2         | Power supply +24 VDC, max. 60mA (total, terminals 1 + 5)                    | Not used          |
| 6    |                        | Configurable Analog Input 2                                                 |                   |
| 7    |                        | Electronic GND                                                              |                   |
| 8    | External Start/Stop    | Start/Stop digital input, +24 VDC internal pull-up, 6mA contact current     | -                 |
| 9    |                        | Electronic GND                                                              |                   |
| 10   | External Lack of Water | Low water digital input, +24 VDC internal pull-up, 6mA contact current      | -                 |
| 11   |                        | Electronic GND                                                              |                   |
| 12   | Digital Input 3        | Configurable Digital Input 3, +24 VDC internal pull-up, 6mA contact current | Solo Run          |
| 13   |                        | Electronic GND                                                              |                   |
| 14   | Analog Output          | Configurable Analog Output                                                  | Motor Speed       |
| 15   |                        | Electronic GND                                                              |                   |
| 16   | Analog Input 3         | Power supply +24 VDC, max. 60mA (total, terminals 16 and 19)                | Not used          |
| 17   |                        | Configurable Analog Input 3                                                 |                   |
| 18   |                        | Electronic GND                                                              |                   |
| 19   | Analog Input 4         | Power supply +24 VDC, max. 60mA (total, terminals 16 and 19)                | Not used          |
| 20   |                        | Configurable Analog Input 4                                                 |                   |
| 21   |                        | Electronic GND                                                              |                   |
| 22   | Digital Input 4        | Configurable Digital Input 4, +24 VDC internal pull-up, 6mA contact current | Not used          |
| 23   |                        | Electronic GND                                                              |                   |
| 24   | Digital Input 5        | Configurable Digital Input 5, +24 VDC internal pull-up, 6mA contact current | Not used          |
| 25   |                        | Electronic GND                                                              |                   |
| 26   | 10 VDC supply          | Power supply +10 VDC, max. 3mA                                              | -                 |
| 27   |                        | Electronic GND                                                              |                   |
| 28   | Communication bus 1    | RS485 port 1: RS485-1B N (-)                                                | Multipump         |
| 29   |                        | RS485 port 1: RS485-1A P (+)                                                |                   |
| 30   |                        | RS485 port 1: RS485-COM                                                     |                   |
| 31   | Communication bus 2    | RS485 port 2: RS485-2B N (-)                                                | Modbus            |
| 32   |                        | RS485 port 2: RS485-2A P (+)                                                |                   |
| 33   |                        | RS485 port 2: RS485-COM                                                     |                   |
| 34   | Communication bus 1    | RS485 port 1: RS485-1B N (-)                                                | Multipump         |
| 35   |                        | RS485 port 1: RS485-1A P (+)                                                |                   |
| 36   |                        | RS485 port 1: RS485-COM                                                     |                   |
| 37   | Communication bus 2    | RS485 port 2: RS485-2B N (-)                                                | Modbus            |
| 38   |                        | RS485 port 2: RS485-2A P (+)                                                |                   |
| 39   |                        | RS485 port 2: RS485-COM                                                     |                   |
| 40   | Relay 1                | Configurable relay 1: Normally Open                                         | Running           |
| 41   |                        | Configurable relay 1: Normally Closed                                       |                   |
| 42   |                        | Configurable relay 1: Common Contact                                        |                   |
| 43   | Relay 2                | Configurable relay 2: Normally Open                                         | Error             |
| 44   |                        | Configurable relay 2: Normally Closed                                       |                   |
| 45   |                        | Configurable relay 2: Common Contact                                        |                   |