Terminal table 1

+	DC24V [+]	Power supply DC24V [+]
+	DC24V [+]	Power supply DC24V [+]
-	DC24V [-]	Power supply DC24V [-]
-	DC24V [-]	Power supply DC24V [-]
A	RS485 [A]	Communication bus RS485 [A]
A	RS485 [A]	Communication bus RS485 [A]
B	RS485 [B]	Communication bus RS485 [B]
B	RS485 [B]	Communication bus RS485 [B]

01	VCOM	Common relay outputs
02	VCOM	Common relay outputs
03	OUT_ON	Output relay 1 [contactor device on]
04	OUT_OP	Output relay 2 [contactor device open]
05	IN_P	Input pulse
06	OUT_CL	Output relay 3 [contactor device close]
07	NA	Not available
08	NA	Not available
09	NA	Not available
10	NA	Not available
11	NA	Not available
12	NA	Not available
13	GND	GND measurements [IN_P], [IN_D1], [IN_D2]
14	GND	GND measurements [IN_P], [IN_D1], [IN_D2]
15	NA	Not available
16	NA	Not available

17	R_B2	Input temperature B2 [high]
18	R_B1	Input temperature B1 [high]
19	R_A2	Input temperature A2 [low]
20	R_A1	Input temperature A1 [low]
21	EC_A2	Input EC A2
22	EC_A1	Input EC A1
23	EC_B2	Input EC B2
24	EC_B1	Input EC B1

Terminal descriptions

+	DC24V [+]	Terminal power supply DC24V of Smartswitch, polartity [PLUS]. The free [PLUS] [+] terminal can be used to supply power to a conterminous Smartswitch.
+		
-	DC24V [-]	Terminal power supply DC24V of Smartswitch, polarity [MIN]. The free [MIN] [-] terminal can be used to supply power to a conterminous Smartswitch.
-		
A	RS485 [A]	Terminal RS485 communication bus, signal line [A].
A		
B	RS485 [B]	Terminal RS485 communication bus, signal line [B].
B		
01	VCOM	Terminal P-contacts of relays. Connect desired voltage type that has to be switched; DC24V [+], or AC24V [P].
02		
03	OUT_ON	Relay contact for switching the power stage of a fertilizer shutter. The relay contact switches what is provided on the terminal(s) [VCOM].
04	OUT_OP	Relay contact for switching the power stage [OPEN] of a fertilizer dosing servo. The relay contact switches what is provided on the terminal(s) [VCOM]. Opening the fertilizer dosing servo has to result in a higher EC value.
06	OUT_CL	Relay contact for switching the power stage [CLOSE] of a fertilizer dosing servo. The relay contact switches what is provided on the terminal(s) [VCOM]. Closing the fertilizer dosing servo has to result in a lower EC value.
05	IN_P	Pulse input for the signal of a flow sensor, that registers the shifted amount of flued in the main pipe of a watersupply system.
13	GND	
18	R_B1	Analog input for the signal of the temperature sensor of EC sensor 1.
20	R_A1	
22	EC_A1	Analog input for the signal of the conduction element of EC sensor 1.
24	EC_B1	
17	R_B2	Analog input for the signal of the temperature sensor of EC sensor 2.
19	R_A2	
21	EC_A2	Analog input for the signal of the conduction element of EC sensor 2.
23	EC_B2	

EC sensor

EC sensor	
Product code	21250255
Product description	EC-Sensor 4K7 NTC FertiMix Go!
Cel constant	1,0 [cm^{-1}]
Temperature element	NTC3k

Flow sensor

Flow sensor	
Product code	04004000
Product description	F15 flowmeter P51530-P0

Status Smartswitch control

Location	LED status	Status Smartswitch control
PCB [1]	Green continuously	Smartswitch connection with touchscreen controller is active. Smartswitch control is inactive.
	Green blinking	Smartswitch connection with touchscreen controller is active. Smartswitch control is active. Smartswitch control alarm status is inactive.
	Red continuously	Smartswitch connection with touchscreen controller is inactive. Smartswitch control is inactive.
	Red blinking	Smartswitch connection with touchscreen controller is active. Smartswitch control is active. Smartswitch control alarm status is active.

Status bus communication

Location	LED status	Status bus communication
PCB [2]	Green blinking	Smartswitch is receiving data over the bus [Rx].
	Red blinking	Smartswitch transmits data over the bus [Tx].

Status device control

Location	LED status	Status device control
Rotary switch [1]	Green continuously	The control [open] is currently active. The connected device is being openend.
Rotary switch [1]	Red continuously	The control [close] is currently active. The connected device is being closed.
Rotary switch [2]	Green continuously	The control [on] is currently active. The connected device is switched on.

HortiMaX growing solutions

Commercial data

Product code	20801500
Product description	SSW EC control [1xOC + 1xOO + 1xQU]
Packing unit	1
Weight	207,12 [g]
Custom tariff number	8537.10.91
Country of origin	NL (Netherlands)

Dimensions

Width	107,6 [mm]
Height	89,6 [mm]
Depth	81,0 [mm]

Ambient conditions

Degree of protection	IP20	
Ambient temperature (operation)	-10 … 50 [°C]	14 [°F] … 122 [°F]
Ambient temperature (storage/transport)	-20 … 50 [°C]	-4 [°F] … 122 [°F]
Permissible humidity (operation)	20 … 85 [%]	
Permissible humidity (storage/transport)	20 … 85 [%]	

General

Mounting type	DIN rail mounting according to EN 60715

Power supply

Supply voltage	DC24V
Current consumption max.	≤ 50 [mA], bij DC24V, bij 25 [°C]

Serial interface

Interface 1	RS485
Connection method	Spring-cage connection
Transmission medium	2-wire Twisted-Pair + signal ground
Transmission length	500 [m]
Transmission speed	115,2 [kBit/s]

EC input

Number of inputs	2
Measuring range	0,0 … 10,0 [mS]

Pulse input

Number of inputs	1
Measuring range	0 … 1000 [Hz]

Relay output

Number of outputs	3
Contact configuration	Normally open contact
Switching voltage max.	24 [V], AC/DC
Switching current max.	1 [A], at 24 [V], AC/DC
Mechanical service life	50×10^6 operations

Connection data

Conductor cross section solid min.	0,2 [mm²]
Conductor cross section solid max.	2,5 [mm²]
Conductor cross section flexible min.	0,2 [mm²]
Conductor cross section flexible max.	2,5 [mm²]
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14

Standards and regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU