



TATSUNO EUROPE

INSTALLATION INSTRUCTIONS FOR THE FUEL DISPENSERS SUNNY-EX EURO

Attachment 2 - Electrical wiring



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INTRODUCTION

This attachment provides examples of electrical wiring and distribution boxes for all variants of the SUNNY-XE EURO fuel dispensers, both the suction version, when the dispenser has its own pump and meter, and the remote version, when the dispenser has only a filter and meter, while it is connected to the station's tank with a central pressure pump.

At the time of publication, the content of this attachment was accurate. The producer reserves the right to change the technical parameters of the appliance or its attributes without a written notice, since the technology is constantly improving and developing.

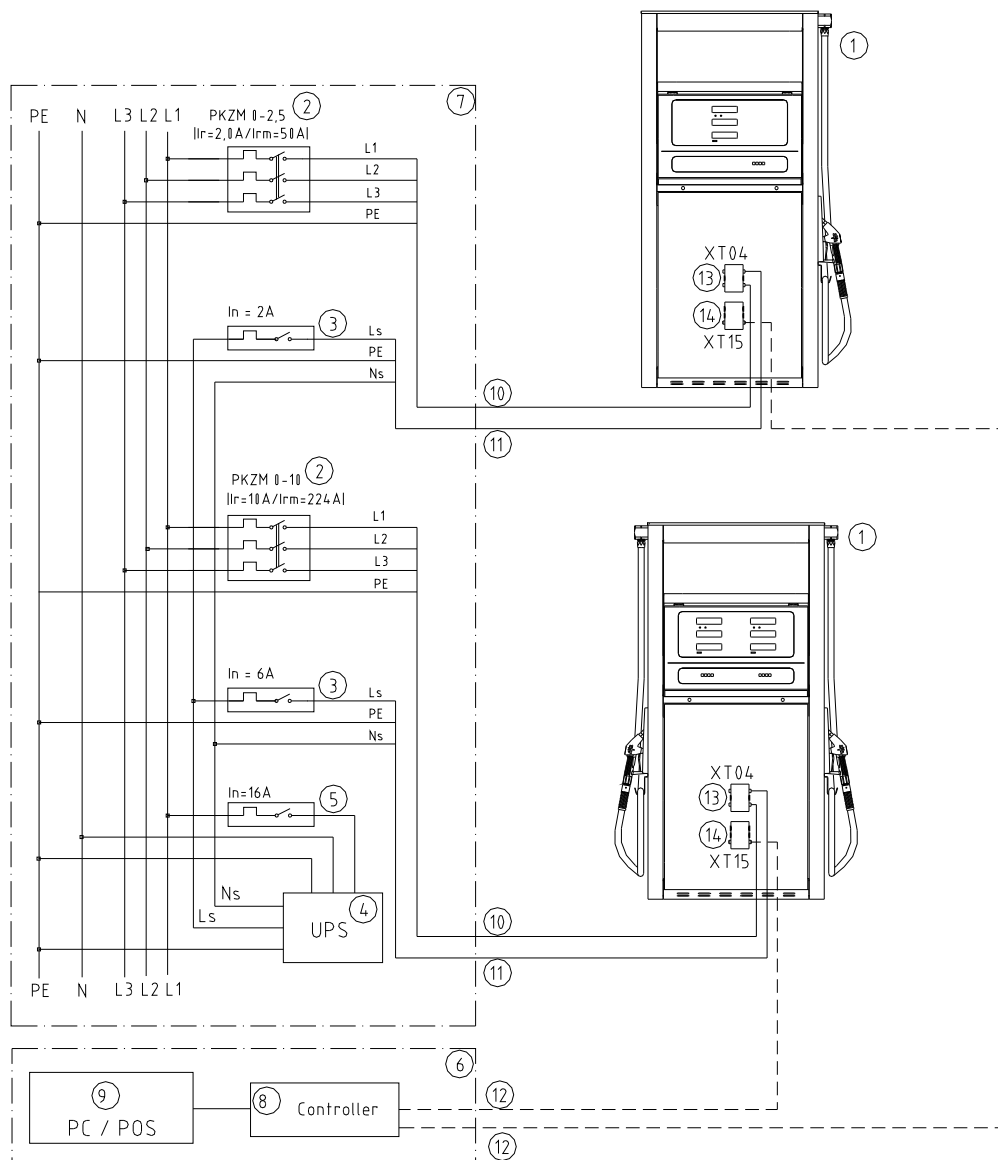
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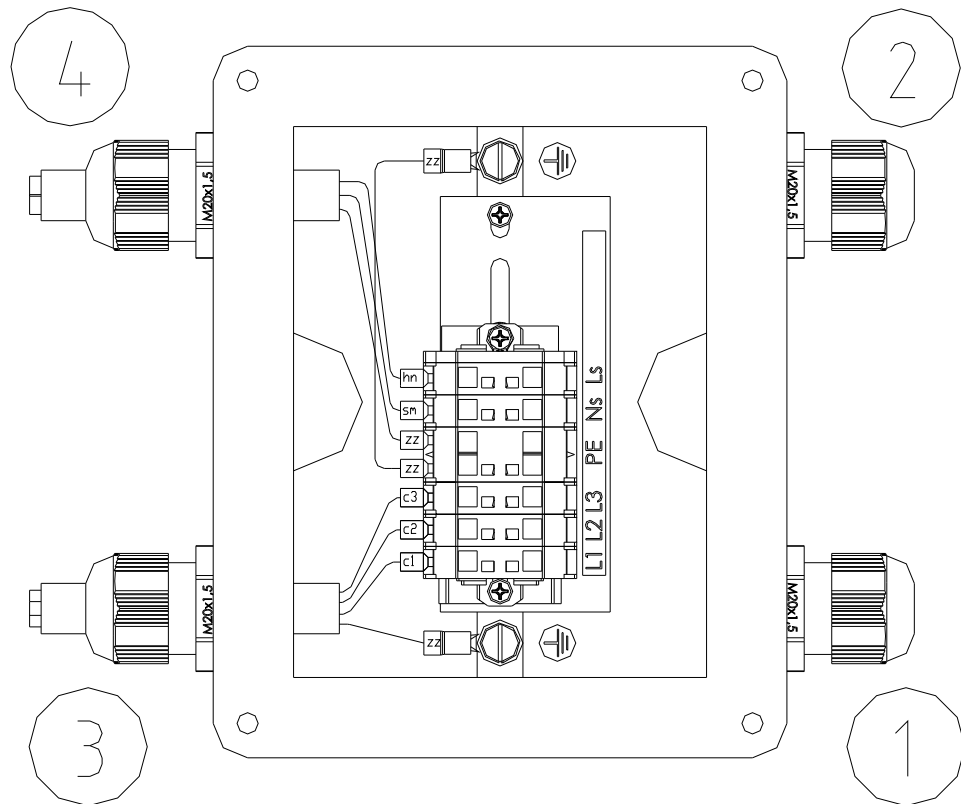
ATTACHMENT 2.1 - ELECTRICAL WIRING IN THE SUCTION VERSION OF FUEL DISPENSERS

ATTACHMENT 2.1.1. - EXAMPLE OF ELECTRICAL WIRING IN THE SUCTION VERSION OF FUEL DISPENSERS



Note	Description	Note	Description
1	Fuel dispenser SUNNY-XE EURO	8	Data converter (RS485 / RS232) or controller
2	Engine circuit breaker with a short-circuit and thermal trigger	9	Controlling appliance (PC, cash desk, POS, console)
3	Overcurrent circuit breaker for protection of the counter In=6A	10	Power supply cable to the engines- FABER KABEL type Y-JZ 4 x 1.5
4	UPS backup power source with power supply stabilisation	11	Power supply cable to the counter- FABER KABEL type Y-JB 3 x 2.5
5	Overcurrent circuit breaker of the backup power source UPS	12	Communication line - FABER KABEL type CY-JZ 5 x 0.75
6	Operator station (kiosk)	13	Power supply distribution box XT04
7	Main distributor for the fuel station technology	14	Distribution box XT15 for the communication system

ATTACHMENT 2.1.2. - SCHEME OF THE POWER SUPPLY DISTRIBUTION BOX XT04



Intake

1	Power supply cable to the engines	
	Type: FABER KABEL type Y-JZ 4 x 1.5 (recommended)	
	Connection: main distributor <----> XT04	
	L1	engine power supply phase black 1 (c1)
	L2	engine power supply phase black 2 (c3)
L3	engine power supply phase black 3 (c3)	
PE	safety protection conductor green-yellow (zz)	

2	Power supply cable to the counter	
	Type: FABER KABEL type Y-JB 3 x 2.5 (recommended)	
	Connection: main distributor <----> XT04	
	Ns	zero conductor for protection of the counter brown (hn)
Ls	phase for protection of the counter light blue (sm)	
PE	safety protection conductor green-yellow (zz)	

Outlet

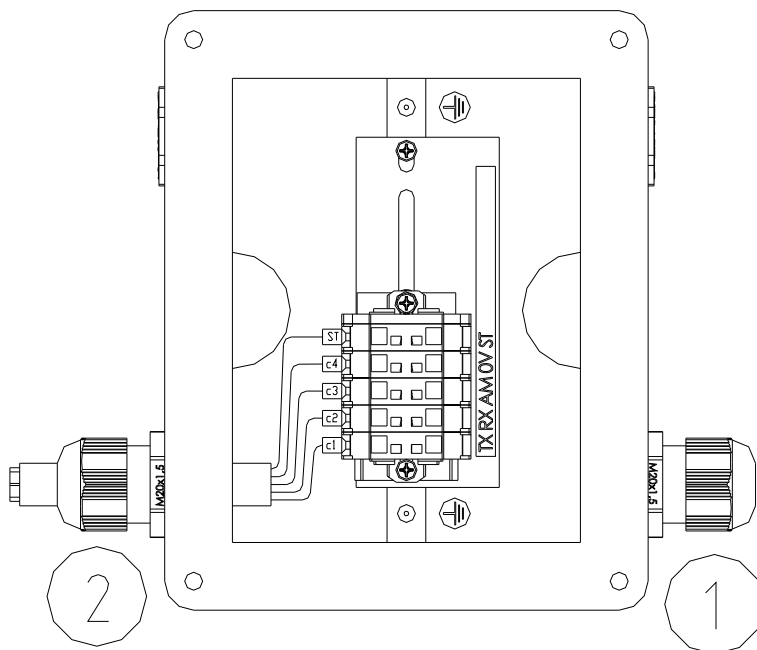
3	Power supply cable to the engines	
	Type: FABER KABEL type Y-JZ 4 x 1.5	
	Connection: XT04 <----> dispenser head	
	L1	phase 230V black 1 (c1)
	L2	engine power supply phase black 2 (c3)
L3	engine power supply phase black 3 (c3)	
PE	safety protection conductor green-yellow (zz)	

4	Power supply cable to the counter	
	Type: FABER KABEL type Y-JB 3 x 2.5	
	Connection: XT04 <----> dispenser head	
	Ns	zero conductor for protection of the counter brown (hn)
Ls	phase for protection of the counter light blue (sm)	
PE	safety protection conductor green-yellow (zz)	

Notes:

This distribution box RK 002/6 is the version Ex II 2G EEx e II T6 and it has a European type certificate FTZÚ 02 ATEX 0021. In the box there can be used only terminals WAGO type 262-130 and 262-230 in the version EEx e II. Maximum load on one connection terminal is 3A/550V if the cross-section is 0.5 mm² and 12A/550V if the cross-section is 2.5 mm². Permitted conductor cross-section ranges from 0.5 to 2.5 mm². The length of the insulated part of the conductor is min. 9 mm and max. 10 mm. Cable clamps M20 x 1.5 are in the version IP66/68.

ATTACHMENT 2.1.3. - SCHEME OF THE DATA DISTRIBUTION BOX XT15



Intake

Outlet

1 Communication cable for the data line		
Type: FABER KABEL type CY-JZ 5 x 0.75 (recommended)		
Connection: kiosk <---> XT15		
1	signal 1	black 1 (c1)
2	signal 2	black 2 (c3)
3	signal 3	black 3 (c3)
4	signal 4	black 4 (c4)
5	shielding	shielding (ST)

2 Communication cable for the data line		
Type: FABER KABEL type CY-JZ 5 x 0.75		
Connection: XT15 <---> dispenser head		
1	signal 1	black 1 (c1)
2	signal 2	black 2 (c3)
3	signal 3	black 3 (c3)
4	signal 4	black 4 (c4)
5	shielding	shielding (ST)

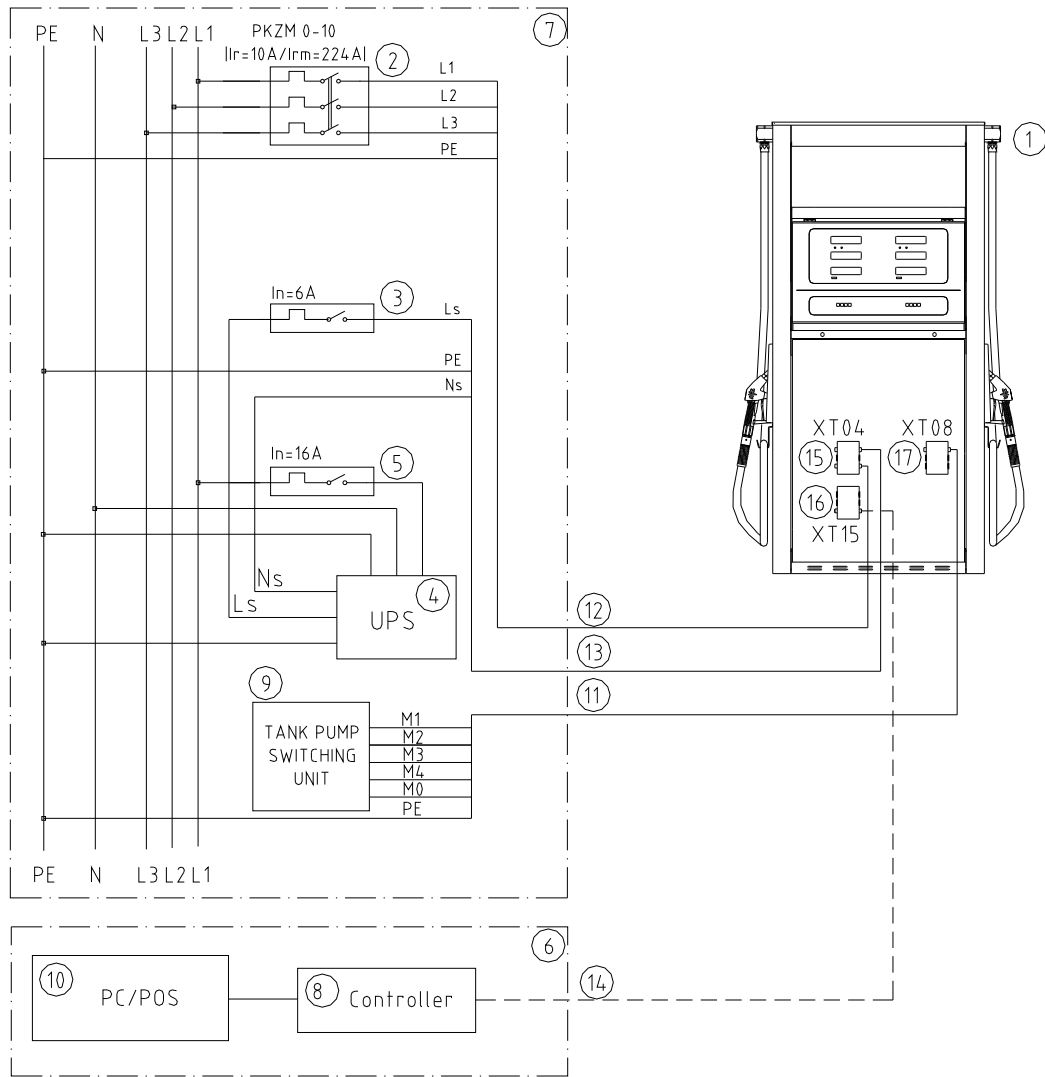
Signal description on the connector of the box (based on the communication protocol type)

Description (protocols and equipment)	/PDE (standard PDE, DART, IFSF-LON)	/PUMA LAN (PUMA MPD, PUMAFIT, HT-TE)	/ER4 (Hectronic Kienzle, ER4, TA2331)	/EASYLINE (Beta Control, ADP, ADPMPD)	/AUTOTANK (AUTOTANK)	/DATECS (POS DATECS)
signal 1	A	TX	YA	D(-)	RCL+	I11
signal 2	B	RX	ZA	D(+)	RCL-	I12
signal 3	-	AM	YB	0V	TCL+	I13
signal 4	-	0V	ZB	-	TCL-	I14
shielding	ST	ST	ST	ST	ST	ST

Notes: This distribution box RK 002/6 is the version Ex II 2G EEx e II T6 and it has a European type certificate FTZÚ 02 ATEX 0021. In the box there can be used only terminals WAGO type 262-130 and 262-230 in the version EEx e II. Maximum load on one connection terminal is 3A/550V if the cross-section is 0.5 mm² and 12A/550V if the cross-section is 2.5 mm². Permitted conductor cross-section ranges from 0.5 to 2.5 mm². The length of the insulated part of the conductor is min. 9 mm and max. 10 mm. Cable clamps M20 x 1.5 are in the version IP66/68. The cable CY-JZ 5 x 0.75 does not have the green-yellow conductor installed. The description on the box connector depends from the data line type. As a rule there is used a data line with a PDE protocol.

ATTACHMENT 2.2 - ELECTRICAL WIRING IN THE REMOTE VERSION OF THE FUEL DISPENSERS

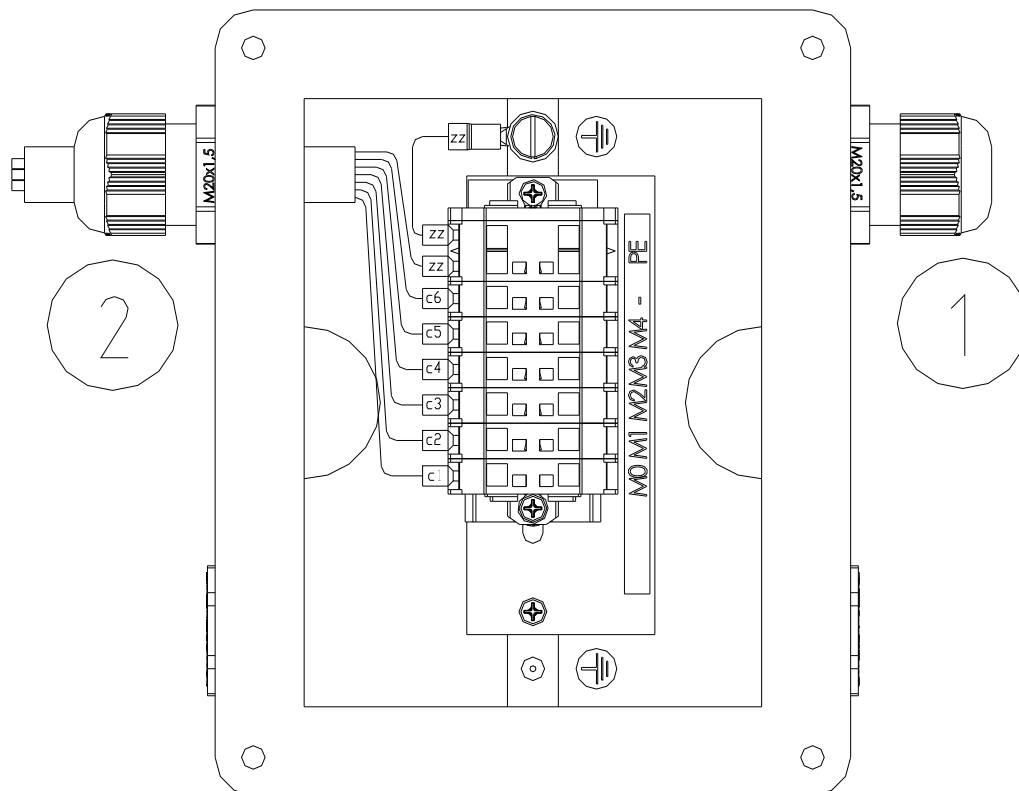
ATTACHMENT 2.2.1. - EXAMPLE OF ELECTRICAL WIRING IN THE REMOTE VERSION OF THE FUEL DISPENSERS



Note	Description	Note	Description
1	Fuel dispenser SUNNY-XE EURO	10	Controlling appliance (PC, cash desk, POS, console)
2	Engine circuit breaker with a short-circuit and thermal trigger	11	Cable for switching the pumps- FABER KABEL type Y-JZ 7 x 1
3	Overcurrent circuit breaker for protection of the counter - In=6A	12	Power supply to the vacuum pump motors - FABER KABEL type Y-JZ 4 x 1.5
4	UPS backup power source with power supply stabilisation	13	Power supply cable to the counter- FABER KABEL type Y-JB 3 x 2.5
5	Overcurrent circuit breaker for the UPS backup power source	14	Communication line - FABER KABEL type CY-JZ 5 x 0.75
6	Operator station (kiosk)	13	Power supply distribution boxXT04
7	Main distributor for the fuel station technology	14	Distribution box for the communication system XT15
8	Data converter (RS485 / RS232) or controller	14	Power supply distribution box for switching the pumps XT08
9	Unit for switching the fuel pumps		

ATTACHMENT 2.2.2. - POWER SUPPLY DISTRIBUTION BOX SCHEME FOR SWITCHING OF THE PUMPS XT08

Distribution boxes XT04 and XT15 are described in Attachment 2.1.2. and Attachment 2.1.3.



Intake

1	Power supply cable for switching the pressure pumps in the tanks	
	Type:	FABER KABEL type Y-JZ 7 x 1 (recommended)
	Connection:	main distributor <---> XT08
M0	shared conductor for switching the pumps	black 1 (c1)
M1	phase for switching the pump 1	black 2 (c2)
M2	phase for switching the pump 2	black 3 (c3)
M3	phase for switching the pump 3	black 4 (c4)
M4	phase for switching the pump 4	black 5 (c5)
-	backup	black 6 (c6)
PE	safety protection conductor	green-yellow (zz)

Outlet

2	Power supply cable for switching the pressure pumps in the tanks	
	Type:	FABER KABEL type Y-JZ 7 x 1
	Connection:	XT08 <---> dispenser head
M0	shared conductor for switching the pumps	black 1 (c1)
M1	phase for switching the pump 1	black 2 (c2)
M2	phase for switching the pump 2	black 3 (c3)
M3	phase for switching the pump 3	black 4 (c4)
M4	phase for switching the pump 4	black 5 (c5)
-	backup	black 6 (c6)
PE	safety protection conductor	green-yellow (zz)

Notes:

This distribution box RK 002/6 is the version Ex II 2G EEx e II T6 and it has a European type certificate FTZÚ 02 ATEX 0021. In the box there can be used only terminals WAGO type 262-130 and 262-230 in the version EEx e II. Maximum load on one connection terminal is 3A/550V if the cross-section is 0.5 mm² and 12A/550V if the cross-section is 2.5 mm². Permitted conductor cross-section ranges from 0.5 to 2.5 mm². The length of the insulated part of the conductor is min. 9 mm and max. 10 mm. Cable clamps M20 x 1.5 are in the version IP66/68.