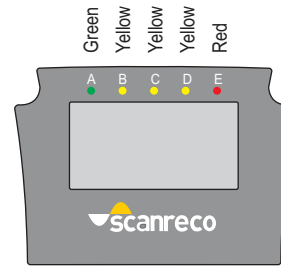
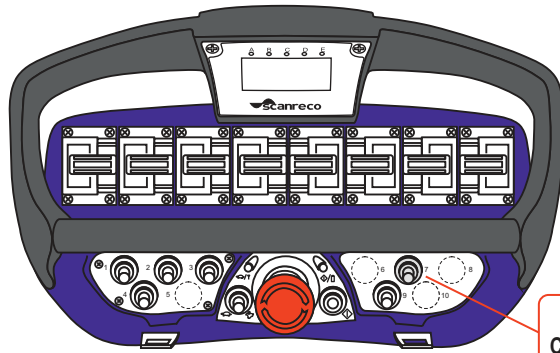


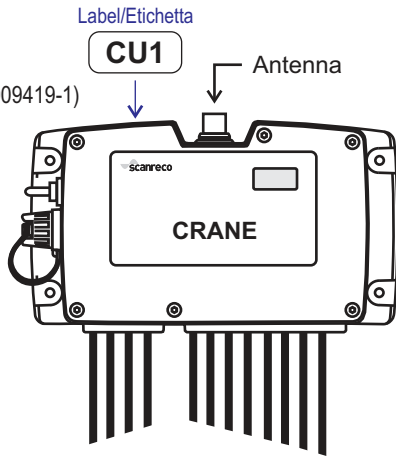
PORTABLE CONTROL UNIT
Type SDC0005sf009419



DISPLAY PANEL
Type 48624

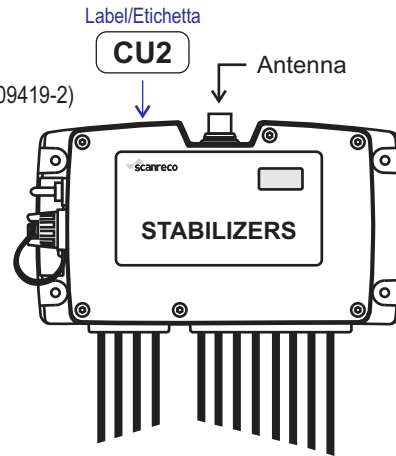
Operative Mode
Crane (CU1) — Stab. (CU2)

CENTRAL UNIT G2B
Type 2010
(SDC00016sf009419-1)



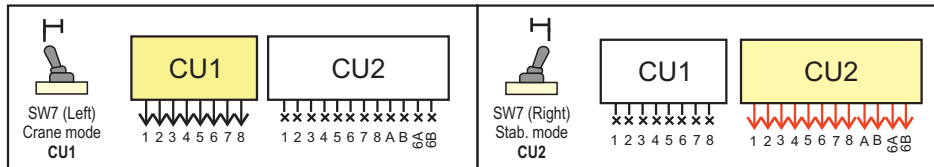
Power supply AUX CAN-bus
Danfoss proportional modules output with AMP connectors

CENTRAL UNIT G2B
Type 3010
(SDC00016sf009419-2)



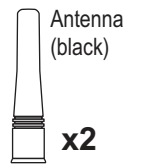
Power supply AUX
On/Off directional valves and On/Off functions with DIN connectors (EDI System mode)

OPERATIVE MODES

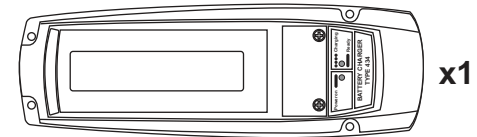


↓ = function enabled ↓ = function enabled (conditioned by Deadman) ↓ x = function blocked

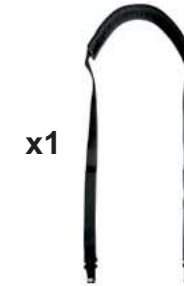
Battery (592)



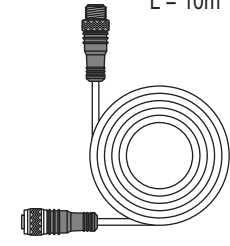
Battery charger 12/24Vdc (434)



Neck strap



Programming cable L = 10m



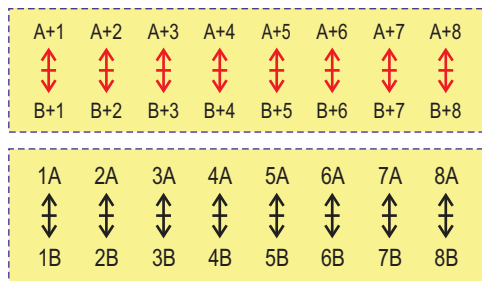
English Manual & Documents



ACCESSORIES

scanrefaber		CODE: SDC0001SF009419
		CUST. CODE: -
DESC: Scanreco RC400/TR02/G2B radio remote control global view with Maxi PCU and no.2 CUs Danfoss/On-Off - 433MHz freq.		
CUSTOMER:		
DATE: 11/02/2026	REV: A-1	SHEET 1 OF 5

FF	Designed
A-1	11/02/2026
Rev.	Date
	Description



(CU2)
Stab. Mode
On/Off outputs

(CU1)
Crane Mode
Danfoss outputs

Switch connections

	left/up	center	right/down
SW1:	1 - 0 - 8		
SW2:	2 > 0 < 3		
SW3:	4 > 0 < 5		
SW4:	9 - - 0		
SW7:	11 - - 12		
SW9:	13 - - 0		

⇄ - = detent
 ⇄> / <⇄ = spring return

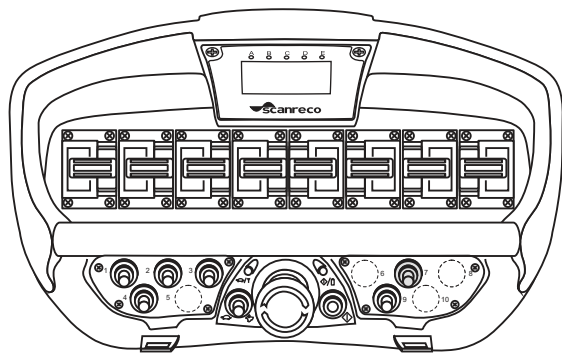
Outputs map CU1

Pos	DF	OUT	bit	Pos	DF	OUT	bit
1	1	1	1	11	10	12	11
2	3	2	2	12	11	-	12
3	4	3	3	13	12	11	13
4	7	4	4	14	13	14	14
5	31	5	5	15	9	-	15
6	5	-	6	16	8	-	16
7	32	-	7	17	37	-	17
8	2	9	8	18	34	-	18
9	6	6	9	19	35	-	19
10	33	-	10	20	36	-	20

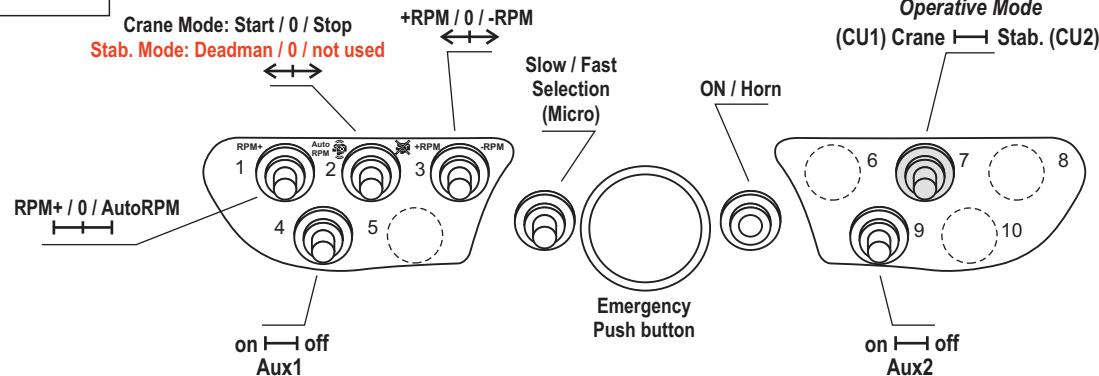
Outputs map CU2

pos	DF	OUT	pos	DF	OUT
1	1	1	11	10	-
2	3	2	12	11	12
3	4	3	13	12	11
4	7	4	14	13	-
5	31	5	15	9	-
6	5	-	16	8	-
7	32	-	17	37	-
8	2	9	18	34	-
9	6	6	19	35	-
10	33	-	20	36	-

SW CU1: sf009419-1-A1 + DC1215
 SW CU2: sf009419-2-A1
 FW CU1: Standard - 2.57 or higher
 FW CU2: Standard - 4.57 or higher
 FW PCU: Standard - 1.57 or higher



Standard overlays for switch-plates
 Etichette standard per piastra switch



Switch with mechanical lock
 "Pull to switch"
 Operative Mode
 (CU1) Crane ⇄ Stab. (CU2)

PCU configuration:

- PCU off time = 5 min.
- LCD display panel controlled via CAN bus by external CCU-X card, through CU1 receiver.
- Transmitter feedback (LED and SCREEN) activated.
- "NO CAN BUS MESSAGES" message activated.
- 5 levels of speed reduction active (Micro).
- Micro (first step): 60%.

CU1 configuration:

- CAN bus: ID 100 - Slave - Baud rate 250Kbps. CAN filter active, Error Frame control not active. Termination not active. TPDO3 activated.
- Speed reduction via CAN bus enabled (RPDO4); maneuvers at 0% (blocked) when a 2 sec. timeout has passed without receiving any RPDO4 message.
- Danfoss modules with single supply.
- Two SETs of speed: SET1 multifunzione. SET2 multifunzione with reduced speed. SET2 is selected when Ex1.10 wire is not connected to a positive, e.g. Ex1.11 wire). Zero position requested for levers to come back from SET2 to SET1.
- Multi Operation Mode active, two way mode.
- Functions 1-2-3-4-5-6-7-8-DV enabled only when CU1 (Crane mode) is selected (SW7 to the left); zero position requested for levers to release the block.

Proportional outputs (CU1):

Ratiometric, range 25-50-75% of the supply voltage.
 A direction: from 50% to 25%.
 B direction: from 50% to 75%.

CU2 configuration:

- CAN bus: ID 100 - Slave - Baud rate 250Kbps. CAN filter active, Error Frame control not active. Termination not active.
- Only one SET of speed: SET1 multifunzione.
- Multi Operation Mode active, single way mode.
- Each lever controls the DV output, the related On/Off function (from 1 to 8) and A or B directional output.
- It is not possible to operate movements in opposite directions at the same time.
- Outputs 6A and 6B used for stabilizers speed selection: 6A ON and 6B OFF = Slow (lever operated less than 80%). 6A OFF and 6B ON = Fast (lever operated greater than 80%).
- Functions 1-2-3-4-5-6-7-8-A-B-DV enabled only when CU2 (Stab. mode) is selected (switch SW7 to the right) and Deadman command activated (switch SW2 to the left); zero position requested for levers to release the block.

PWM outputs (CU2):

- The loads connected to the PWM outputs must have a minimum impedance of 3.7 Ohm at 12Vdc or 7.4 Ohm at 24Vdc, maximum current of 2500mA.
- Functions 1-2-3-4-5-6-7-A-B with On/Off calibration, I_{max}. 2300mA.
- Function 8-6A-6B with On/Off calibration, I_{max}. 1800mA.

DV outputs:

- Activated with proportional levers.
- Maximum current: 2A.
- DV delay off: 0.5 sec.

Digital outputs:

- Maximum current: 1.8A.
- Emergency stop output (Out8): positive when PCU is connected with the CU, available in both CUs.
- The digital outputs are always enabled in all CUs, except of Start/Stop, enabled in "Crane mode" only.

AutoRPM working switch description:

When SW1 is on RPM+ (left position) output Out1 remains always ON.
 When SW1 is on AutoRPM (right position) output Out9 is ON while output Out1 turns ON only when a proportional lever is not in center. Out1 turns OFF with a 6 seconds delay after all levers have returned in center.
 When SW1 is on neutral position, outputs Out1 and Out9 are always off.

General information:

- The programming cable is used to bypass radio mode or to program the radio remote control.
- Perform pairing procedure with both CUs, before with CU2 and after with CU1.
- Working frequency (Europe): 434.050 - 434.550 MHz.
- For all other radio remote control information, see the "User manual".

Note di produzione:

Pulsantiera:
 Tempo di spegnimento pulsantiera = 5 min.
 5 livelli Micro.
 Disconnect LED e SCREEN attivi.
 Messaggio "NO CAN BUS MESSAGES" attivo.
 SW7 (1-1) con blocco meccanico cod. A2002700054 e cappuccio cod. A2000900090.

Unità Centrali:

Applicare etichette identificazione ricevitori cod. F0000051073.
 Lo switch SW7 abilita alternativamente le funzioni di CU1 o di CU2; richieste leve a zero per rilasciare i blocchi.
 Uscite digitali sempre abilitate in entrambi i ricevitori, ad eccezione delle uscite Start/Stop (solo CU1) e Deadman (solo CU2).
 Ritardo spegnimento DV 0.5 sec.

- CU1:

SET1 e SET2 multifunzione, SET2 con velocità ridotte. Tutte le funzioni e uscita DV bloccate con SW7 a destra. Alimentazione singola moduli Danfoss.

- CU2:

Solo SET1 multifunzione. Modo EDI system multifunzione a 8 funzioni: ogni leva comanda l'uscita DV, la relativa funzione da 1 a 8 (On/Off) e l'uscita direzionale A o B (On/Off). Tutte le funzioni e uscita DV bloccate con SW7 a sinistra. Uscite 6A=ON e 6B=OFF quando leve azionate meno dell'80%. Uscite 6A=OFF e 6B=ON quando leve azionate più dell'80%.

CAN bus (CU1):

TPDO1 prelevato a valle.
 TPDO3 attivo.
 Mappatura standard bit1-32.
 Terminazione non attiva.
 Error frame disabilitato.
 CAN filter attivo.
 Speed reduction attivo, blocco manovre in assenza del messaggio RPDO4.

Procedura collaudo funz. prop (CU1):

Lanciare il pacchetto CAN di Speed Reduction con velocità al 100%.

Informazioni Generali:

Effettuare la procedura di riconoscimento con entrambe le UC, prima con CU2 e successivamente con CU1.

scanrefaber		CODE: SDC0001SF009419
		CUST. CODE: -
DESC: Scanreco Maxi PCU configuration and function description.		
CUSTOMER:		
DATE: 11/02/2026	REV. A-1	SHEET 2 OF 5

Conn. K4	Cable	Description
K4.1	Ex1.1	Out1
K4.2	Ex1.2	Out2
K4.3	Ex1.3	Out3
K4.4	Ex1.4	Out4
K4.5	Ex1.5	Out5
K4.6	Ex1.6	Out6
K4.7	Ex1.7	GND
K4.8	Ex1.8	Din1
K4.9	Ex1.9	Din2
K4.10	Ex1.10	Din3
K4.11	Ex1.11	+Vdc in Remote

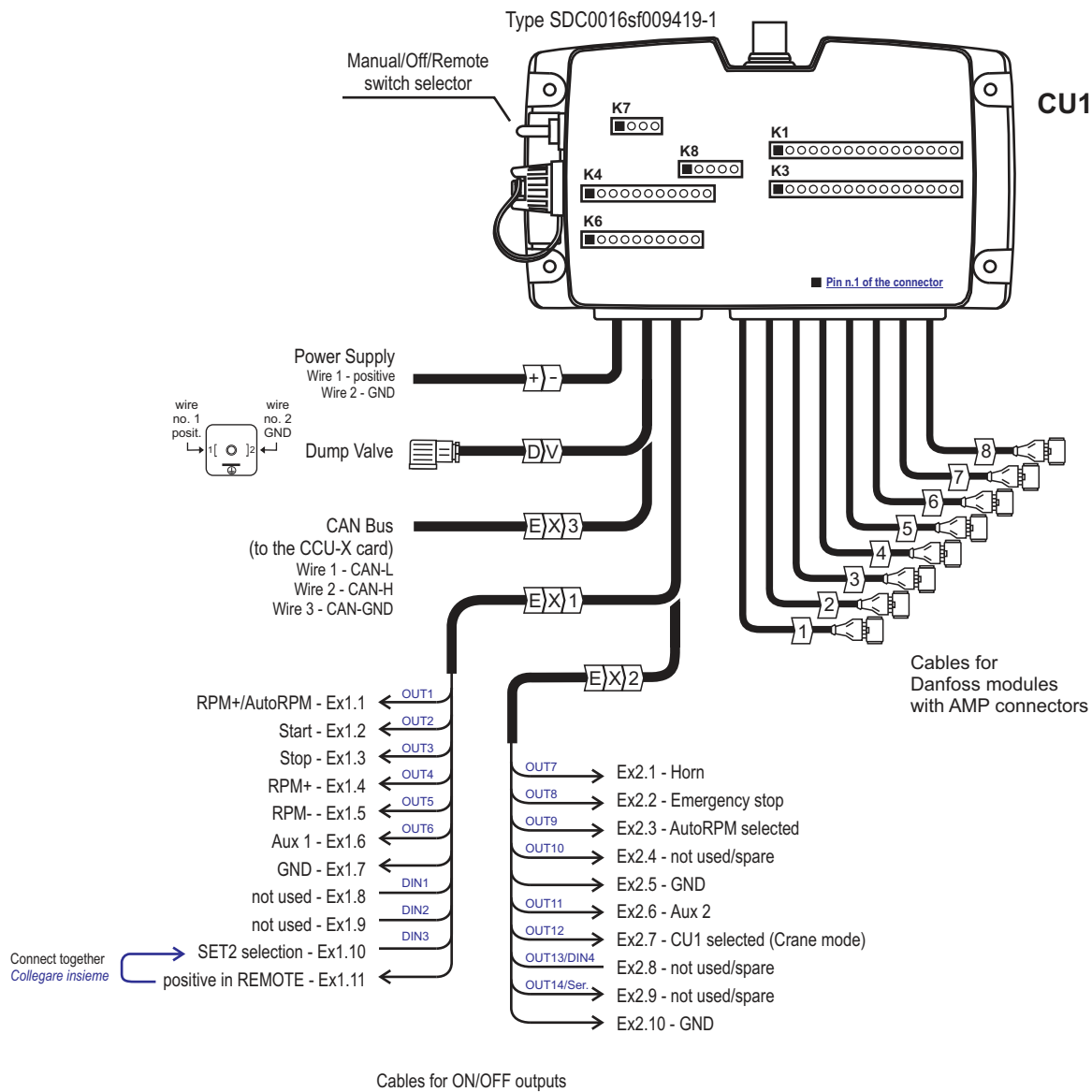
Conn. K6	Cable	Description
K6.1	Ex2.1	Out7
K6.2	Ex2.2	Out8
K6.3	Ex2.3	Out9
K6.4	EX2.4	Out10
K6.5	Ex2.5	GND
K6.6	Ex2.6	Out11
K6.7	Ex2.7	Out12
K6.8	Ex2.8	Out13/Din4
K6.9	Ex2.9	Out14/Serial
K6.10	Ex2.10	GND

Conn. K7	Cable	Description
K7.1	+/-1	+ 12/24Vdc
K7.2	+/-2	GND
K7.3	DV.1	+ Dump valve
K7.4	DV.2	GND

Conn. K8	Cable	Description
K8.1	-	CAN-H
K8.2	-	CAN-L
K8.3	Ex3.3	CAN-GND
K8.4	Ex3.2	CAN-H
K8.5	Ex3.1	CAN-L

	Conn. K1	Cable	Description
Function no.1	K1.1	1.1	Power 1
	K1.2	1.2	Signal 1
	K1.3	1.3(GY)	GND
	K1.4	-	-
Function no.2	K1.5	2.1	Power 2
	K1.6	2.2	Signal 2
	K1.7	2.3(GY)	GND
	K1.8	-	-
Function no.3	K1.9	3.1	Power 3
	K1.10	3.2	Signal 3
	K1.11	3.3(GY)	GND
	K1.12	-	-
Function no.4	K1.13	4.1	Power 4
	K1.14	4.2	Signal 4
	K1.15	4.3(GY)	GND
	K1.16	-	-

	Conn. K3	Cable	Description
Function no.5	K3.1	5.1	Power 5
	K3.2	5.2	Signal 5
	K3.3	5.3(GY)	GND
	K3.4	-	-
Function no.6	K3.5	6.1	Power 6
	K3.6	6.2	Signal 6
	K3.7	6.3(GY)	GND
	K3.8	-	-
Function no.7	K3.9	7.1	Power 7
	K3.10	7.2	Signal 7
	K3.11	7.3(GY)	GND
	K3.12	-	-
Function no.8	K3.13	8.1	Power 8
	K3.14	8.2	Signal 8
	K3.15	8.3(GY)	GND
	K3.16	-	-



Wiring harness code/lenght		Prop . connection
LH: SDC0015sf009419-1	RH: 47753	<p>AMP</p>
+/- - 2,35m	Proport. outputs - 1,8m	
DV - 1,9m		
EX1 - 2,9m		
EX2 - 2,9m		
EX3 - 2,9m		

scanrefaber		CODE: SDC0001SF009419
		CUST. CODE: -
DESC: Central unit "CU1" for Danfoss with wirings and AMP connectors.		
CUSTOMER:		
DATE: 11/02/2026	REV. A-1	SHEET 3 OF 5

Conn. K4	Cable	Description
K4.1	Ex1.1	Out1
K4.2	Ex1.2	Out2
K4.3	Ex1.3	Out3
K4.4	Ex1.4	Out4
K4.5	Ex1.5	Out5
K4.6	Ex1.6	Out6
K4.7	Ex1.7	GND
K4.8	Ex1.8	Din1
K4.9	Ex1.9	Din2
K4.10	Ex1.10	Din3
K4.11	Ex1.11	+Vdc in Remote

Conn. K6	Cable	Description
K6.1	Ex2.1	Out7
K6.2	Ex2.2	Out8
K6.3	Ex2.3	Out9
K6.4	8.1	Out10
K6.5	8.2	GND
K6.6	Ex2.6	Out11
K6.7	Ex2.7	Out12
K6.8	6A.1	Out13/Din4
K6.9	6B.1	Out14/Serial
K6.10	Ex2.10	GND

} Function 8

Conn. K7	Cable	Description
K7.1	+/-1	+ 12/24Vdc
K7.2	+/-2	GND
K7.3	DV.1	+ Dump valve
K7.4	DV.2	GND

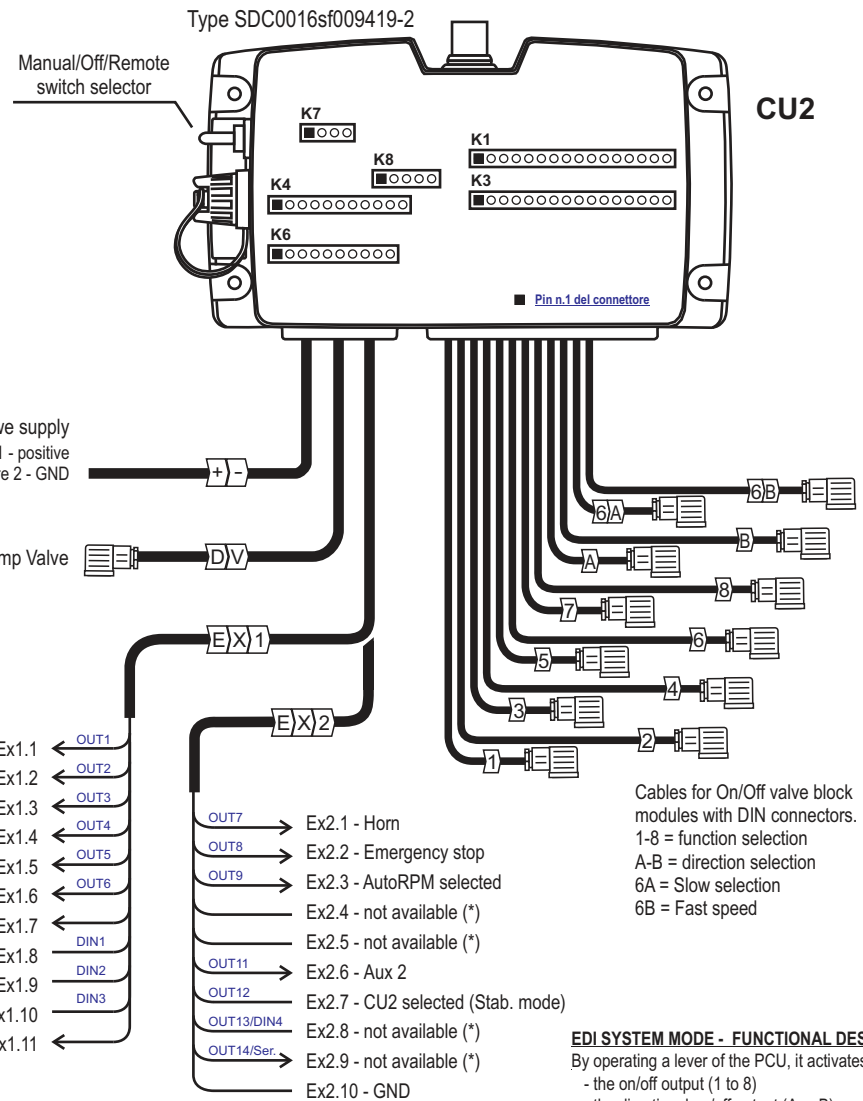
Conn. K8	Cable	Description
K8.1	-	CAN-H
K8.2	-	CAN-L
K8.3	-	CAN-GND
K8.4	-	CAN-H
K8.5	-	CAN-L

	Conn. K1	Cable	Description
Function no.1	K1.1	1.1	PWM 1a
	K1.2	1.2	GND
	K1.3	-	PWM 1b
	K1.4	-	GND
Function no.2	K1.5	2.1	PWM 2a
	K1.6	2.2	GND
	K1.7	-	PWM 2b
	K1.8	-	GND
Function no.3	K1.9	3.1	PWM 3a
	K1.10	3.2	GND
	K1.11	-	PWM 3b
	K1.12	-	GND
Function no.4	K1.13	4.1	PWM 4a
	K1.14	4.2	GND
	K1.15	-	PWM 4b
	K1.16	-	GND

	Conn. K3	Cable	Description
Function no.5	K3.1	5.1	PWM 5a
	K3.2	5.2	GND
	K3.3	-	PWM 5b
	K3.4	-	GND
Function no.6	K3.5	6.1	PWM 6a
	K3.6	6.2	GND
	K3.7	-	PWM 6b
	K3.8	6A.2	GND
Function no.7	K3.9	7.1	PWM 7a
	K3.10	7.2	GND
	K3.11	-	PWM 7b
	K3.12	6B.2	GND
Function no.8	K3.13	A.1	PWM 8a
	K3.14	A.2	GND
	K3.15	B.1	PWM 8b
	K3.16	B.2	GND

(*): UNUSABLE (not connected inside CU).
Non collegato alle morsettiere interne,
isolare il conduttore internamente all'UC.

Wiring harness code/lenght		Prop . connection
LH: SDC0015sf009419-2	RH: SDC0015sf009419-3	
+/- - 2,35m DV - 1,9m EX1 - 2,9m EX2 - 2,9m	A-B - 1,8m 6A-6B - 1,8m 1-2-3-4-5-6-7-8 - 1,8m	
NB: black cables 2x1mm ²		



- RPM+/AutoRPM - Ex1.1 ← OUT1
- Start - Ex1.2 ← OUT2
- Stop - Ex1.3 ← OUT3
- +RPM - Ex1.4 ← OUT4
- RPM - Ex1.5 ← OUT5
- Aux 1 - Ex1.6 ← OUT6
- GND - Ex1.7 ← DIN1
- not used/spare - Ex1.8 ← DIN2
- not used/spare - Ex1.9 ← DIN3
- not used/spare - Ex1.10
- positive in REMOTE - Ex1.11 ←

- OUT7 → Ex2.1 - Hom
- OUT8 → Ex2.2 - Emergency stop
- OUT9 → Ex2.3 - AutoRPM selected
- Ex2.4 - not available (*)
- Ex2.5 - not available (*)
- OUT11 → Ex2.6 - Aux 2
- OUT12 → Ex2.7 - CU2 selected (Stab. mode)
- OUT13/DIN4 → Ex2.8 - not available (*)
- OUT14/Ser. → Ex2.9 - not available (*)
- Ex2.10 - GND

Cables for On/Off valve block modules with DIN connectors.
1-8 = function selection
A-B = direction selection
6A = Slow selection
6B = Fast speed

EDI SYSTEM MODE - FUNCTIONAL DESCRIPTION:
By operating a lever of the PCU, it activates together:
- the on/off output (1 to 8)
- the directional on/off output (A or B)
- the DV output
All proportional PWM outputs are set as on/off functions.
It is not possible to control movements on opposite sides at the same time.
Multiple movements can be activated on the same side.

scanrefcofaber		CODE: SDC001SF009419
		CUST. CODE: -
DESC: Central unit "CU2" for PWM A+B with wirings and DIN connectors.		
CUSTOMER:		
DATE: 11/02/2026	REV. A-1	SHEET 4 OF 5

TPDO1 Analogue channels message

IDENTIFIER

0x180 + Node_Id	byte 0	byte 1	byte 2	byte 3	byte 4	byte 5	byte 6	byte 7
-----------------	--------	--------	--------	--------	--------	--------	--------	--------

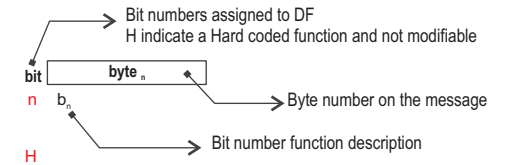
Analogue channels	Function 1	Function 2	Function 3	Function 4	Function 5	Function 6	Function 7	Function 8
DIR A	0xFE	0xFE	0xFE	0xFE	0xFE	0xFE	0xFE	0xFE
Neutral	0x7F	0x7F	0x7F	0x7F	0x7F	0x7F	0x7F	0x7F
DIR B	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00

TPDO2 Digital channels message

IDENTIFIER

0x280 + Node_Id	byte 0	byte 1	byte 2	byte 3	byte 4	byte 5	byte 6	byte 7
-----------------	--------	--------	--------	--------	--------	--------	--------	--------

bit	byte 0	bit	byte 1	byte 2	bit	byte 3	bit	byte 4	bit	byte 5	bit	byte 6	bit	byte 7
1	b0 RPM+ (SW1)	9	b0 Aux 1		17	b0 not used	25	b0 not used	H	b0 Micro level LSB (*)	H	b0 Battery level b0 (*)	H	b0 Reserved
2	b1 Start	10	b1 not used		18	b1 not used	26	b1 not used	H	b1 Micro level (*)	H	b1 Battery level b1 (*)	H	b1 Reserved
3	b2 Stop	11	b2 Crane mode (CU1)		19	b2 not used	27	b2 not used	H	b2 Micro level MSB (*)	H	b2 Reserved	H	b2 Reserved
4	b3 +RPM	12	b3 Stab. mode (CU2)		20	b3 not used	28	b3 not used	H	b3 Switch micro right on	H	b3 Reserved	H	b3 Reserved
5	b4 -RPM	13	b4 Aux 2	0 = PCU on 0xFF = PCU off	21	b4 Din1 (not used)	29	b4 not used	H	b4 Switch micro left on	H	b4 Reserved	H	b4 Reserved
6	b5 not used	14	b5 not used		22	b5 Din2 (not used)	30	b5 not used	H	b5 Stop reason (**)	H	b5 Rocket Flex connected	H	b5 Reserved
7	b6 not used	15	b6 not used		23	b6 Din3 (1=SET1 / 0=SET2)	31	b6 not used	H	b6 Radio quality b0 (*)	H	b6 2.4GHz system	H	b6 Reserved
8	b7 AutoRPM	16	b7 not used		24	b7 Horn	32	b7 not used	H	b7 Radio quality b1 (*)	H	b7 Reserved	H	b7 Reserved



**Stop reason: 1= E-stop button pressed or PCU inactivity guard, 0= shut down due to battery depletion, loss of communication.

TPDO3 Analogue outputs message

IDENTIFIER

0x380 + Node_Id	byte 0	byte 1	byte 2	byte 3	byte 4	byte 5	byte 6	byte 7
-----------------	--------	--------	--------	--------	--------	--------	--------	--------

Analogue outputs	Output 1	Output 2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8
DIR A	0xFE	0xFE	0xFE	0xFE	0xFE	0xFE	0xFE	0xFE
Neutral	0x7F	0x7F	0x7F	0x7F	0x7F	0x7F	0x7F	0x7F
DIR B	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00

*Micro level representation			
MSB	LSB	Meaning	
1	0	1	Micro level 5 th
1	0	0	Micro level 4 th
0	1	1	Micro level 3 rd
0	1	0	Micro level 2 nd
0	0	1	Micro level 1 st
0	0	0	No micro level

*Radio quality representation		
b1	b0	Meaning
1	1	Quality 75-100%
1	0	Quality 50-75%
0	1	Quality 25-50%
0	0	Quality 0-25%

*Battery level representation		
b1	b0	Meaning
1	1	Battery 75-100%
1	0	Battery 50-75%
0	1	Battery 25-50%
0	0	Battery 0-25%

Note message TPDO3:

The value of the bytes is affected by outputs calibration, selected Micro level and CAN messages (Speed reduction).

Display management

All the display management information (Icons - Real time box - Bargraph -Text - Hardware resources) can be consulted on manual "DCxxx Frame assignment".

CAN protocol information:

All the other CAN bus management information can be consulted on "CAN BUS protocol G2B and G3B CANopen-K" or higher version.

scanrefaber		CODE: SDC0001SF009419
		CUST. CODE: -
DESC: CAN bus configuration.		
CUSTOMER:		
DATE: 11/02/2026	REV. A-1	SHEET 5 OF 5