



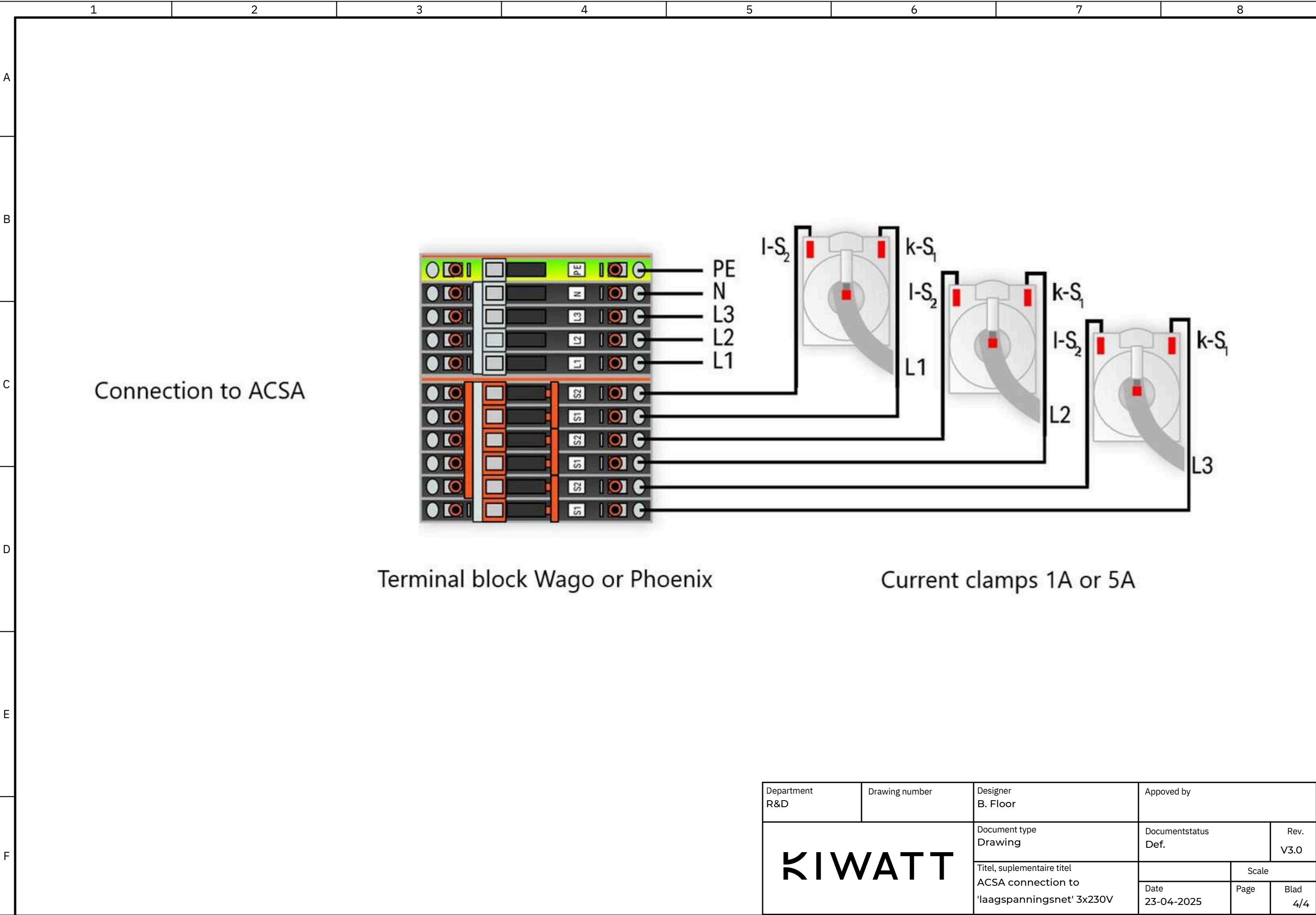
ACSA kWh-meter

Aansluiting op laagspanningsnet.

Sheet 1: Algemeen installatieschema

Sheet 2: Voorbereiden midden spanning-installateur

Sheet 3: Datasheet



Project No. : P2002	Written:	Examined:	Approved:
Project Name : ACSA Document No. : <i>Optional stamp/signature:</i>			
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Pinout ACS Autonomous V1.2			

Outline:

Contains pinout for the communication busses and pinout for the PCB terminals of the ACS Autonomous hardware version 1.2

Distribution:

REConvert,SW

Rev.	Date	Reason / Contents	Person in Charge	Approval
B	25/10/2023	Updated distribution	MKO	
A	04/07/2023	Generated document	WODY	

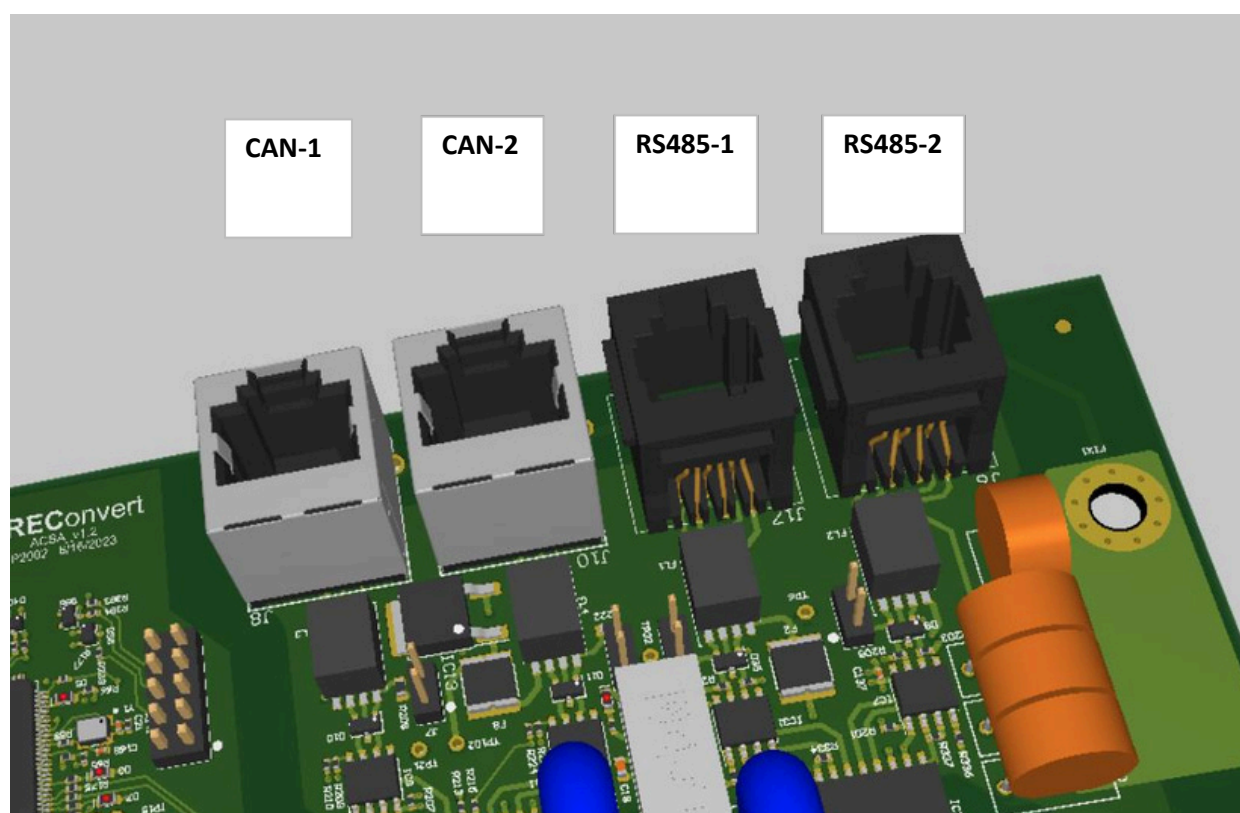
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1. Communication Pinout

RJ45 CAN-1	#	description	RJ45 CAN-2	#	description
	1	CANH		1	CANH
	2	CANL		2	CANL
	3	NC		3	NC
	4	VAUX (19V incoming)		4	VAUX (19V incoming)
	5	5VS (outgoing)		5	5VS (outgoing)
	6	NC		6	NC
	7	SGND		7	SGND
	8	SGND		8	SGND

RJ12 RS485-1	#	description	RJ12 RS485-2	#	description
	1	5VS (outgoing)		1	5VS (outgoing)
	2	NC		2	NC
	3	B		3	B
	4	A		4	A
	5	SGND		5	SGND
	6	NC		6	NC



2. PCB Terminal pinout

#	Pin no.	Name	Description	Input / Output	Value
KL5	8	VAUX12V_IN	Positive terminal of an external power supply for the ACSA.	Input	12VDC
	7	VAUX-	Negative terminal of an external power supply for the ACSA.	Input	0V (SGND)
	6	NC	NC	NC	NC
	5	AUX_IN+	Used to measure if AUX relay has been switched (switched at the same time as AUX relay)	Input	Max 5V
	4	AUX_IN-	Used to measure if AUX relay has been switched (switched at the same time as AUX relay)	Input	Max 5V
	3	SMA_REL_FB+	Used to measure if SMA relay has been switched (switched at the same time as SMA relay).	Input	Max 5V
	2	SMA_REL_FB-	Used to measure if SMA relay has been switched (switched at the same time as SMA relay)	Input	Max 5V
	1	NC	NC	NC	NC
KL4	8	MAIN_REL_NC	Output of miniature relay to switch MAIN relay, normally closed.	Output	230VAC
	7	MAIN_REL_K	Output of miniature relay to switch MAIN relay, normally open.	Output	230VAC
	6	V_REL_GRID	Input of miniature relay to switch MAIN relay (externally connected to VL1_GRID)	Input	230VAC
	5	NC	NC	NC	NC
	4	AUX_REL_NC	Output of miniature relay to switch AUX relay, normally closed.	Output	230VAC
	3	AUX_REL_K	Output of miniature relay to switch AUX relay, normally open.	Output	230VAC
	2	V_REL_AUX	Input of miniature relay to switch AUX relay (externally connected to either VL1_GRID or VL1_HOME)	Input	230VAC
	1	NC	NC	NC	NC
KL3	8	SMAL_REL_K	Output of miniature relay to switch SMA relay, normally closed.	Input	230VAC
	7	SMAL_REL_NC	Output of miniature relay to switch SMA relay, normally open.	Output	230VAC
	6	V_REL_HOME	Input of miniature relay to switch SMA and GND relay (externally connected to VL1_HOME)	Input	230VAC
	5	NC	NC	NC	NC
	4	GND_REL_NC	Output of miniature relay to switch GND relay, normally closed.	Output	230VAC
	3	GND_REL_K	Output of miniature relay to switch GND relay, normally open.	Output	230VAC
	2	MAIN_REL_FB+	Used to measure if MAIN relay has been switched (switched at the same time as MAIN relay)	Input	Max 5V
	1	MAIN_REL_FB-	Used to measure if MAIN relay has been switched (switched at the same time as MAIN relay)	Input	Max 5V
KL2	8	NC	NC	NC	NC
	7	VPE_HOME	PE from Grid (used together with VN_HOME to measure if the GND-relay is closed)	Input	0V(PE)
	6	ICP	Positive terminal for current transformer L3	Input	$R \cdot I$
	5	ICN	Negative terminal current transformer L3	Input	$R \cdot I$
	4	IBP	Positive terminal for current transformer L2	Input	$R \cdot I$
	3	IBN	Negative terminal current transformer L2	Input	$R \cdot I$
	2	IAP	Positive terminal for current transformer L1	Input	$R \cdot I$
	1	IAN	Negative terminal current transformer L1	Input	$R \cdot I$

KL1	8	VN_GRID	Used as N for measurements on L1_HOME, L2_HOME, L3_HOME	Input	0V (N)
	7	VL3_GRID	Measure voltage of L3_GRID	Input	230VAC
	6	VL2_GRID	Measure voltage of L2_GRID	Input	230VAC
	5	VL1_GRID	Measure voltage of L1_GRID	Input	230VAC
	4	VN_HOME	Used as N for measurements on L1_HOME, L2_HOME, L3_HOME and VPE_HOME	Input	0V (N)
	3	VL3_HOME	Measure voltage of L3_HOME	Input	230VAC
	2	VL2_HOME	Measure voltage of L2_HOME	Input	230VAC
	1	VL1_HOME	Measure voltage of L1_HOME	Input	230VAC

