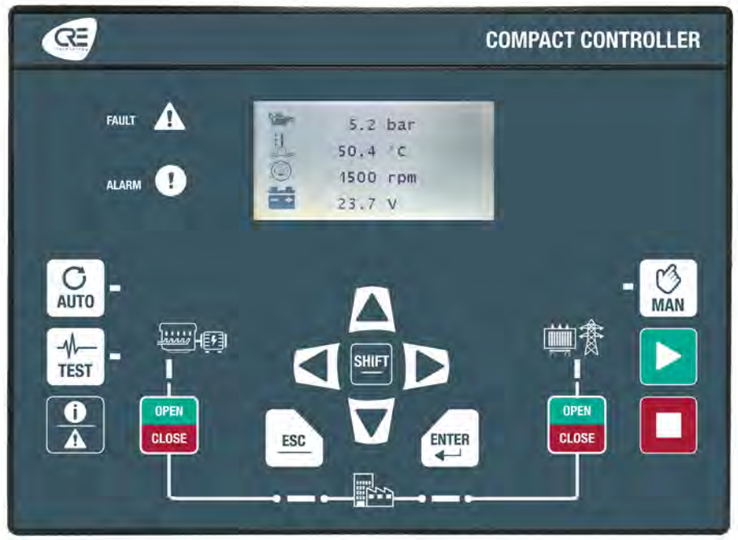

REVISION	MODIFICATION	DATE	DRAWN	CHECKED	APPROVED
A	FIRST RELEASE	19/05/2019	DB		

Website: www.cretechnology.com
Email: info@cretechnology.com
Support: support@cretechnology.com
Skype: support-cretechnology.com

DRAWN: DB

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DATE: 17/03/2022

CRE TECHNOLOGY

130, allée Charles-Victor Naudin

Zone des templiers Sophia-Antipolis - 06410 Biot - France

Phone: +33 (0) 4 92 38 86 82 Fax: +33 (0) 4 92 38 86 83

STANDARD WIRING SCHEMATICS

GENSYS COMPACT MAINS HMI / CORE

DRAWING N° : A56-MAINS-00 / 10 - DWG - 001

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

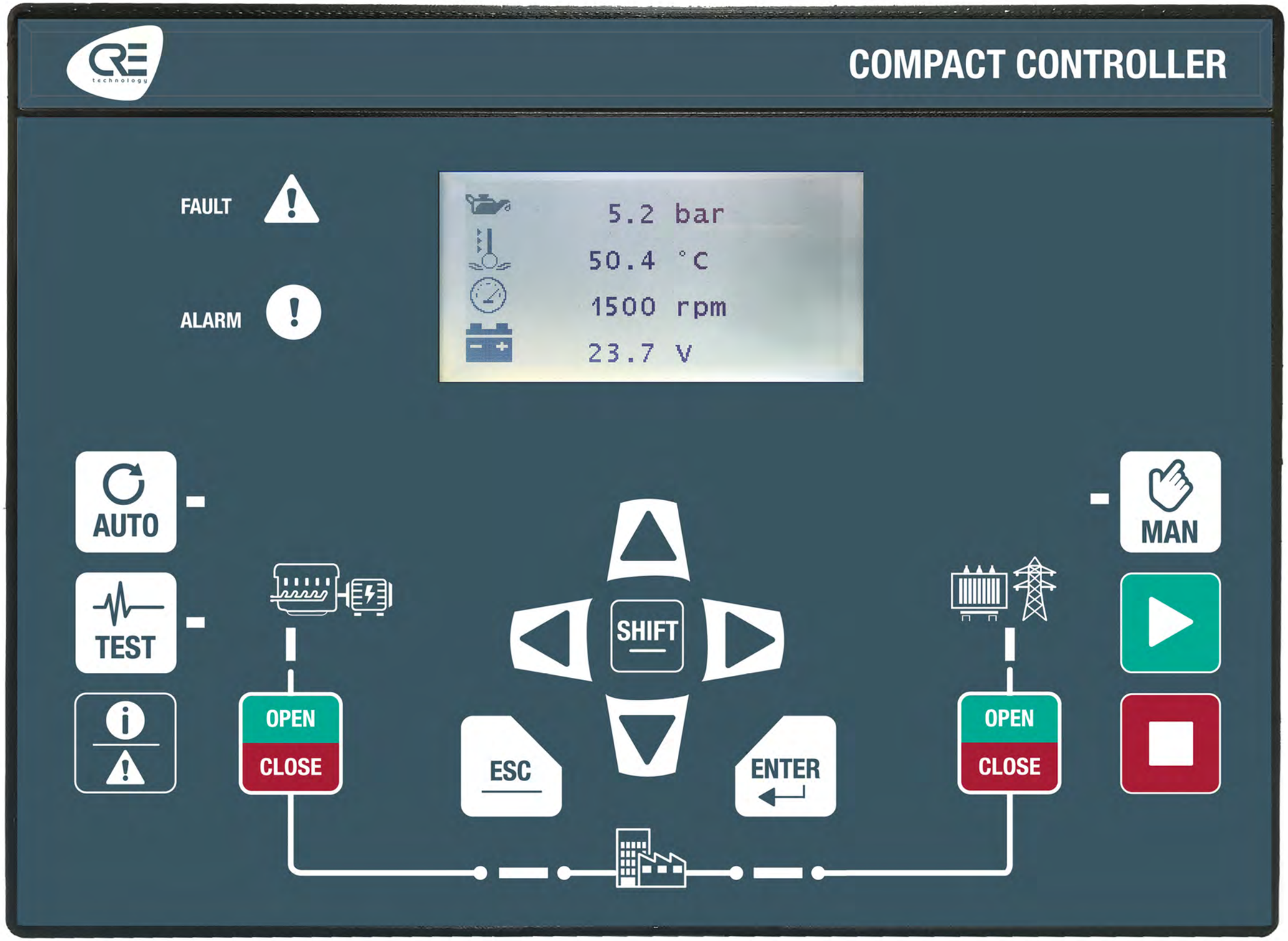
FOLIO	DESIGNATION

Created: 17/03/2022				
Drawing n°: A56-MAINS-00 / 10 - DWG - 001				
Drawn: DB	A	19/05/2019	FIRST RELEASE	DB
	REVISION	DATE	MODIFICATION	DRAWN

GENSYS COMPACT MAINS HMI / CORE
STANDARD WIRING SCHEMATICS

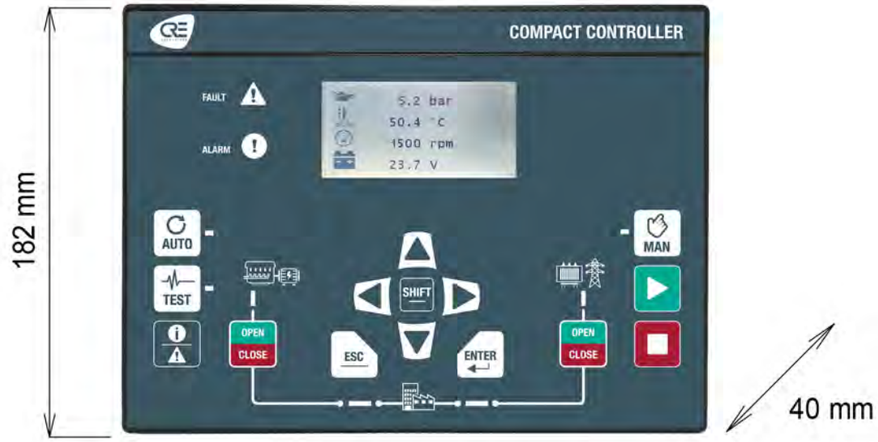
Sheet list

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20



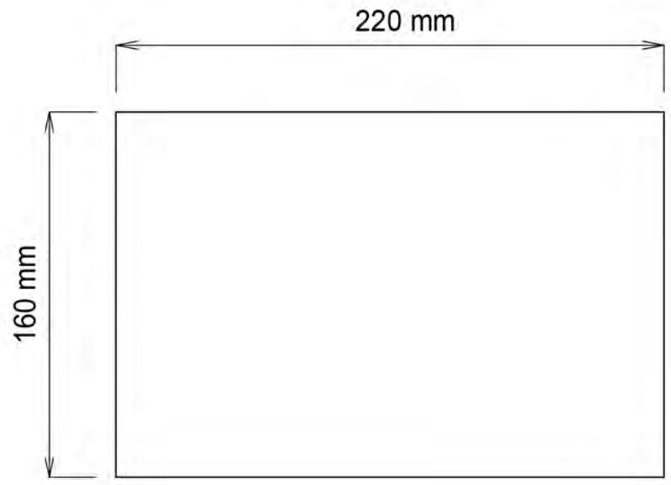
Created: 17/03/2022						GENSYS COMPACT MAINS HMI / CORE STANDARD WIRING SCHEMATICS	Module Front view
Drawing n°: A56-MAINS-00 / 10 - DWG - 001							
Drawn: DB	A	19/05/2019	FIRST RELEASE	DB			
	REVISION	DATE	MODIFICATION	DRAWN			

Created: 17/03/2022				GENSYS COMPACT MAINS HMI / CORE STANDARD WIRING SCHEMATICS	Module Rear / Core view
Drawing n°: A56-MAINS-00 / 10 - DWG - 001					PAGE 04 (03 / 05)
Drawn: DB	A	19/05/2019	FIRST RELEASE	DB	
	REVISION	DATE	MODIFICATION	DRAWN	



HMI VERSION OVERALL DIMENSIONS

CORE VERSION OVERALL DIMENSIONS

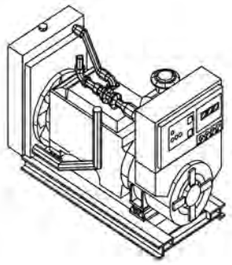


HMI VERSION PANEL CUTOUT DIMENSIONS

CORE VERSION MOUNTING SCREWS DIMENSIONS

Created: 17/03/2022					GENSYS COMPACT MAINS HMI / CORE STANDARD WIRING SCHEMATICS
Drawing n°: A56-MAINS-00 / 10 - DWG - 001					Dimensions / Panel cut
Drawn: DB	A	19/05/2019	FIRST RELEASE	DB	PAGE 05 (04 / 06)
	REVISION	DATE	MODIFICATION	DRAWN	

GENERATOR 1



Speed / Voltage control
Engine / alternator monitoring

PC connection
Modbus TCP
Remote monitoring
i4Gen
Switch

MAINS

Mains monitoring

I/O extension
J1939

CAN bus

Ethernet

Generator 3-phase
current sensing

Generator 3-phase + Neutral (optionnal)
voltage sensing

Mains 1-phase
current sensing

Mains 3-phase + Neutral (optionnal)
voltage sensing

QGE

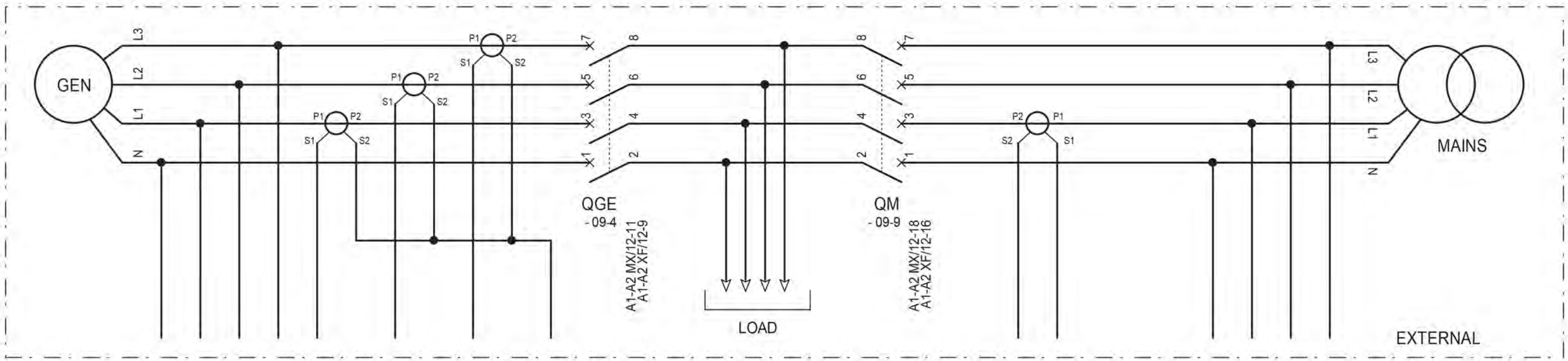
Breaker control

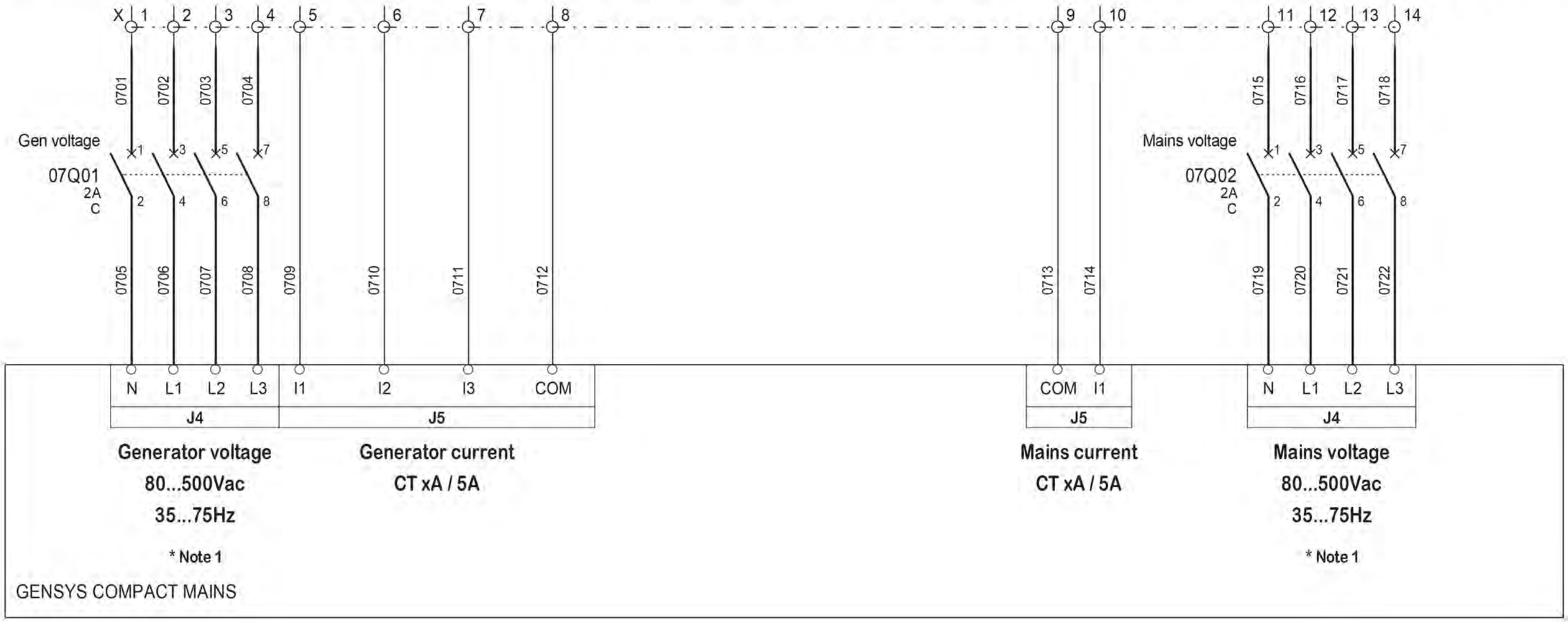
Breaker control

QM

LOAD

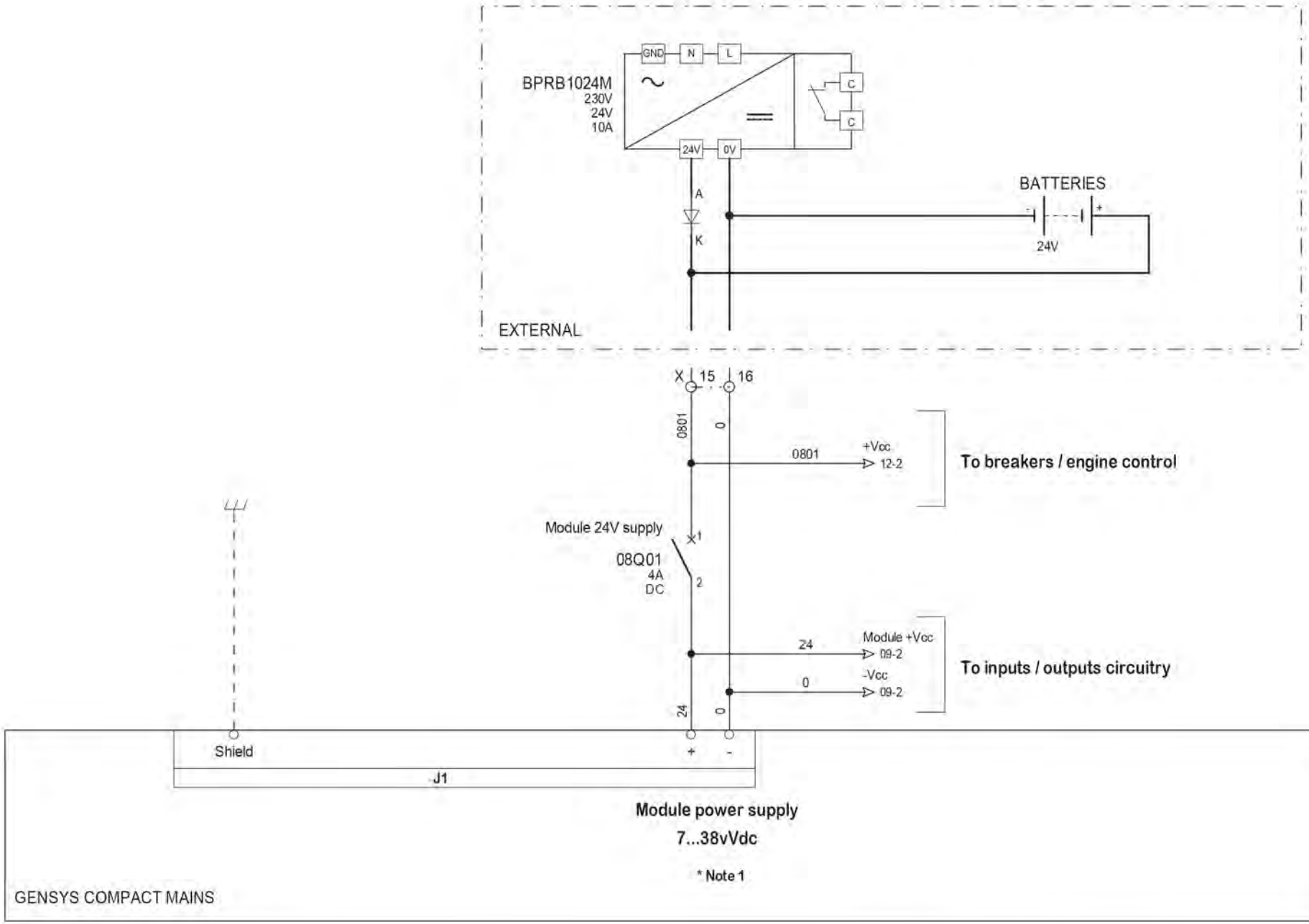
Created: 17/03/2022					GENSYS COMPACT MAINS HMI / CORE STANDARD WIRING SCHEMATICS
Drawing n°: A56-MAINS-00 / 10 - DWG - 001					Single line diagram
Drawn: DB	A	19/05/2019	FIRST RELEASE	DB	PAGE 06 (05 / 07)
	REVISION	DATE	MODIFICATION	DRAWN	





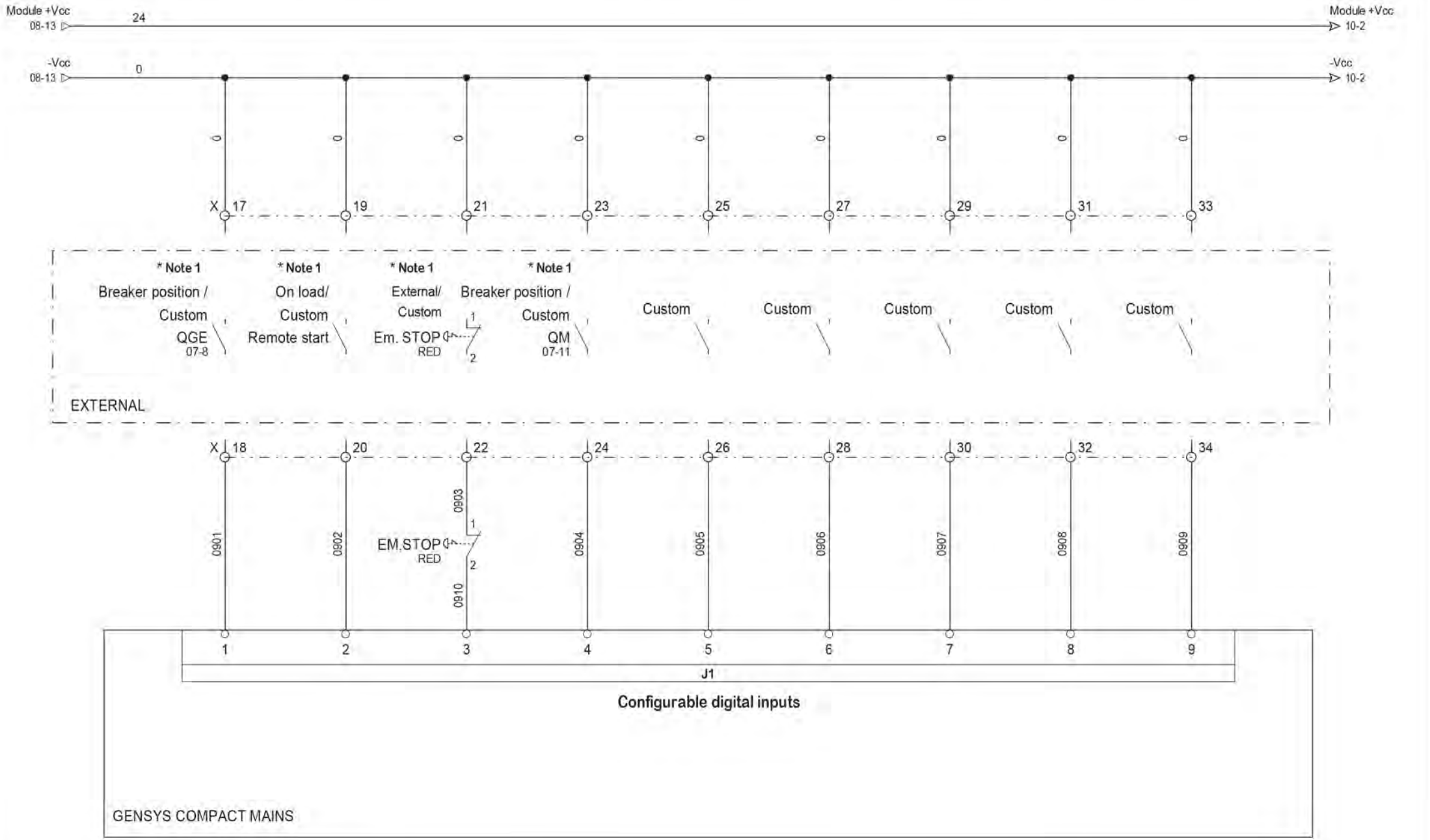
* Note1: Shall voltage transformers be required, refer to technical documentation

	Created: 17/03/2022					GENSYS COMPACT MAINS HMI / CORE STANDARD WIRING SCHEMATICS	Voltages and currents sensing	PAGE 07 ◄ 06 08 ►
	Drawing n°: A56-MAINS-00 / 10 - DWG - 001							
	Drawn: DB	A	19/05/2019	FIRST RELEASE	DB			
		REVISION	DATE	MODIFICATION	DRAWN			



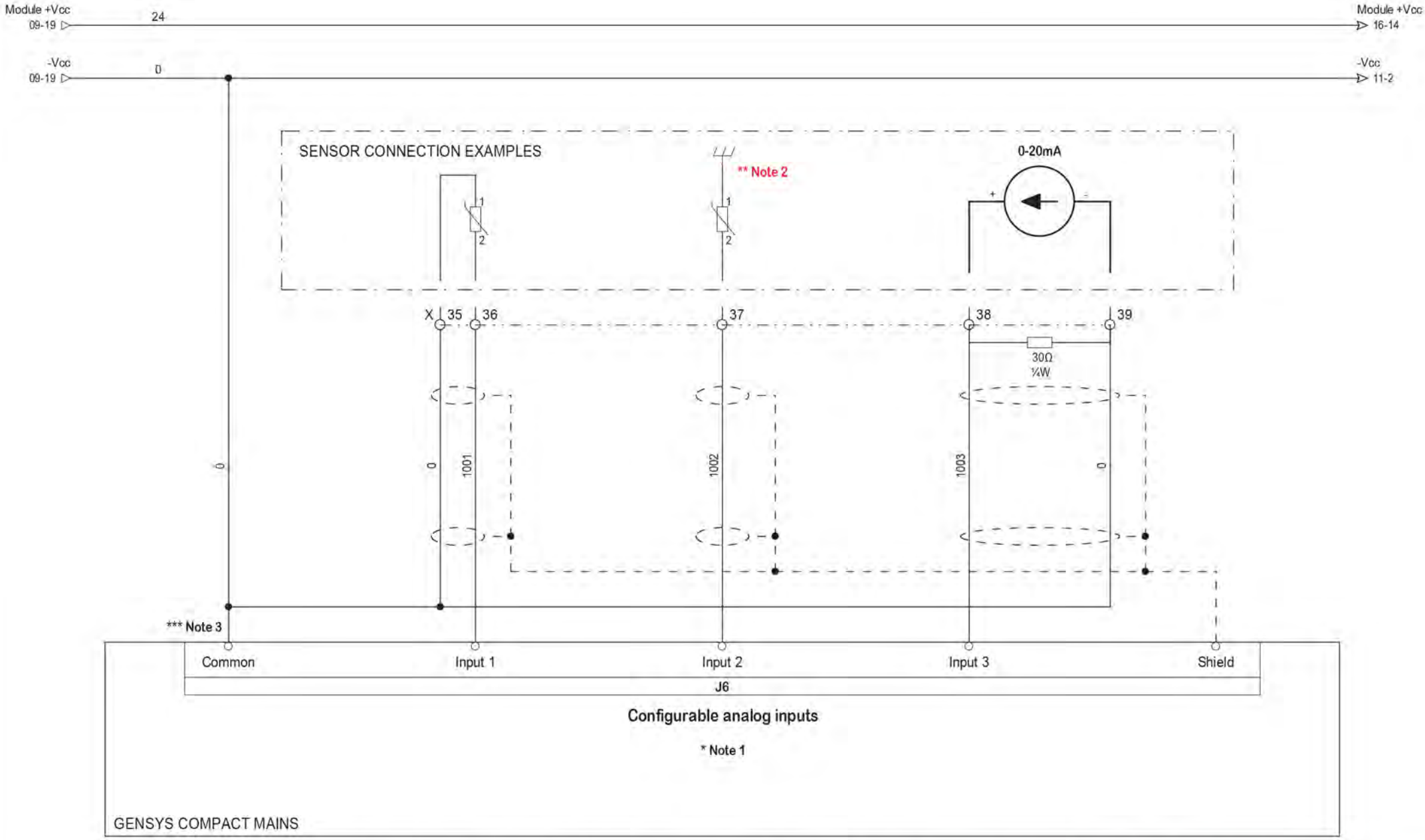
* Note1: Example given with use of a 24Vdc battery charger, but applies identically with 12Vdc

Created: 17/03/2022						GENSYS COMPACT MAINS HMI / CORE STANDARD WIRING SCHEMATICS	Power supply and shield connection	PAGE 08 (07 09)
Drawing n°: A56-MAINS-00 / 10 - DWG - 001								
Drawn: DB	A	19/05/2019	FIRST RELEASE	DB				
	REVISION	DATE	MODIFICATION	DRAWN				



* Note 1: Default setting, can be adjusted via PC software as desired

	Created: 17/03/2022					GENSYS COMPACT MAINS HMI / CORE STANDARD WIRING SCHEMATICS	Digital inputs	PAGE 09 (08 10)
	Drawing n°: A56-MAINS-00 / 10 - DWG - 001	A	19/05/2019	FIRST RELEASE	DB			
	Drawn: DB	REVISION	DATE	MODIFICATION	DRAWN			



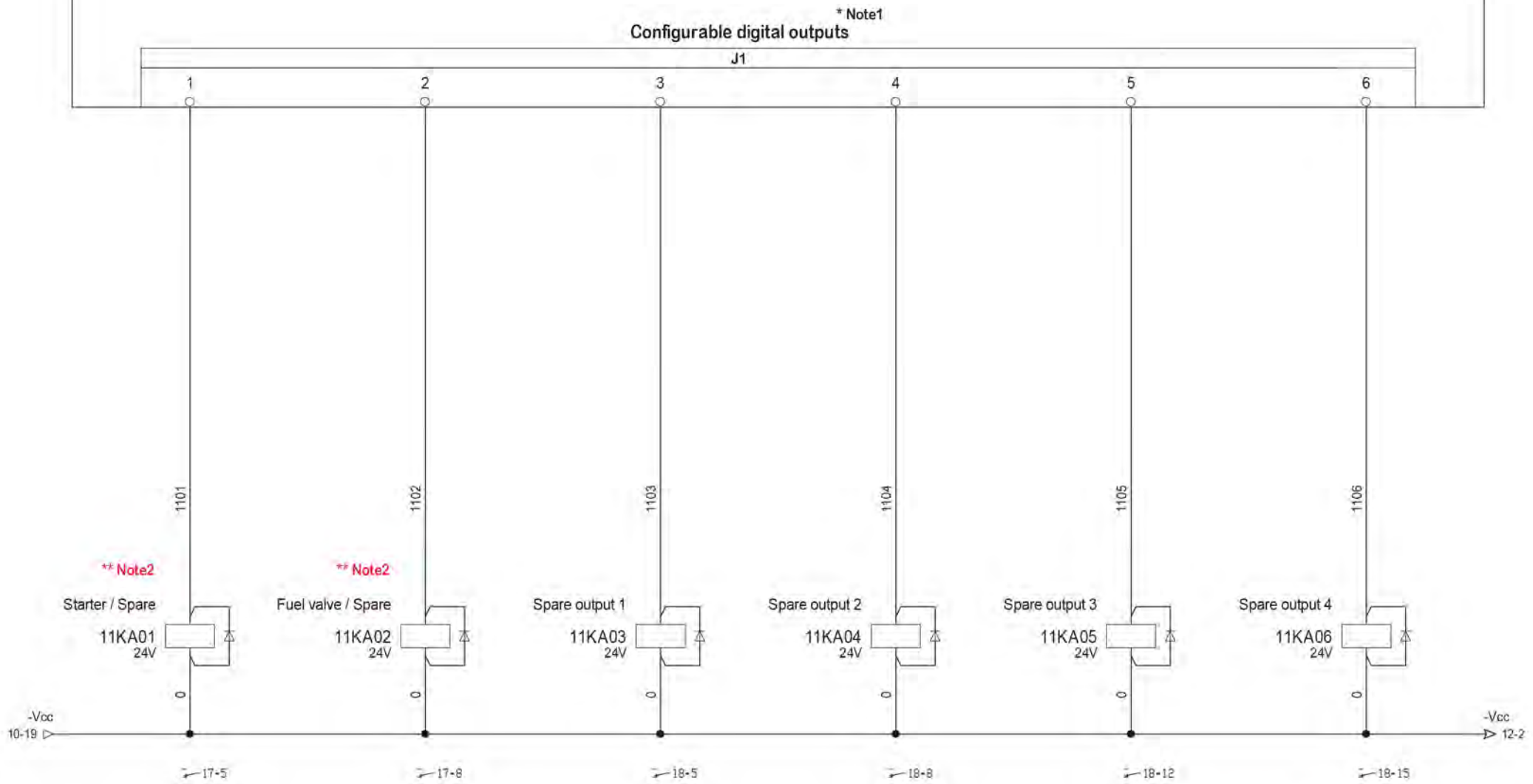
* Note1: Analog inputs can be used with resistive sensors (max. range 0-500 Ohms), with external 20mA current transducers fitted with a 30-ohm 1/4 Watt resistor or as additional digital inputs

** Note2: Ensure engine body and 0Vcc are connected in case of use of a single-wire sensor

*** Note3: The common analog input terminal must have a direct connection to the -Batt terminal of the controller

Created: 17/03/2022						GENSYS COMPACT MAINS HMI / CORE STANDARD WIRING SCHEMATICS	Analog inputs
Drawing n°: A56-MAINS-00 / 10 - DWG - 001							
Drawn: DB	A	19/05/2019	FIRST RELEASE	DB			
	REVISION	DATE	MODIFICATION	DRAWN			

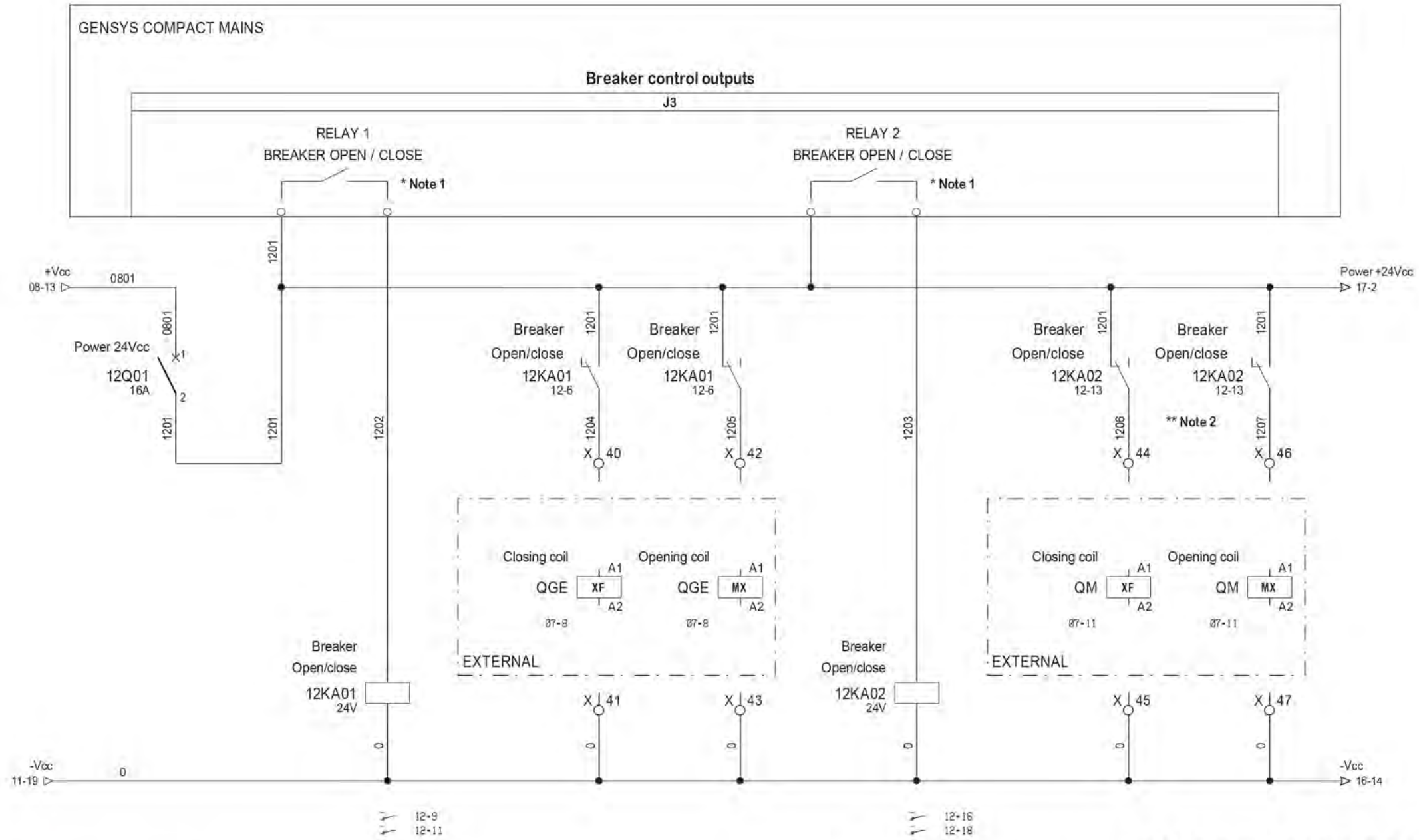
GENSYS COMPACT MAINS



* Note1: Maximum output current is 1.8 Amps

** Note2: External relay recommended for starter & fuel valve controls

	Created: 17/03/2022					GENSYS COMPACT MAINS HMI / CORE STANDARD WIRING SCHEMATICS	Digital outputs	PAGE 11 (10 / 12)
	Drawing n°: A56-MAINS-00 / 10 - DWG - 001	A	19/05/2019	FIRST RELEASE	DB			
	Drawn: DB	REVISION	DATE	MODIFICATION	DRAWN			

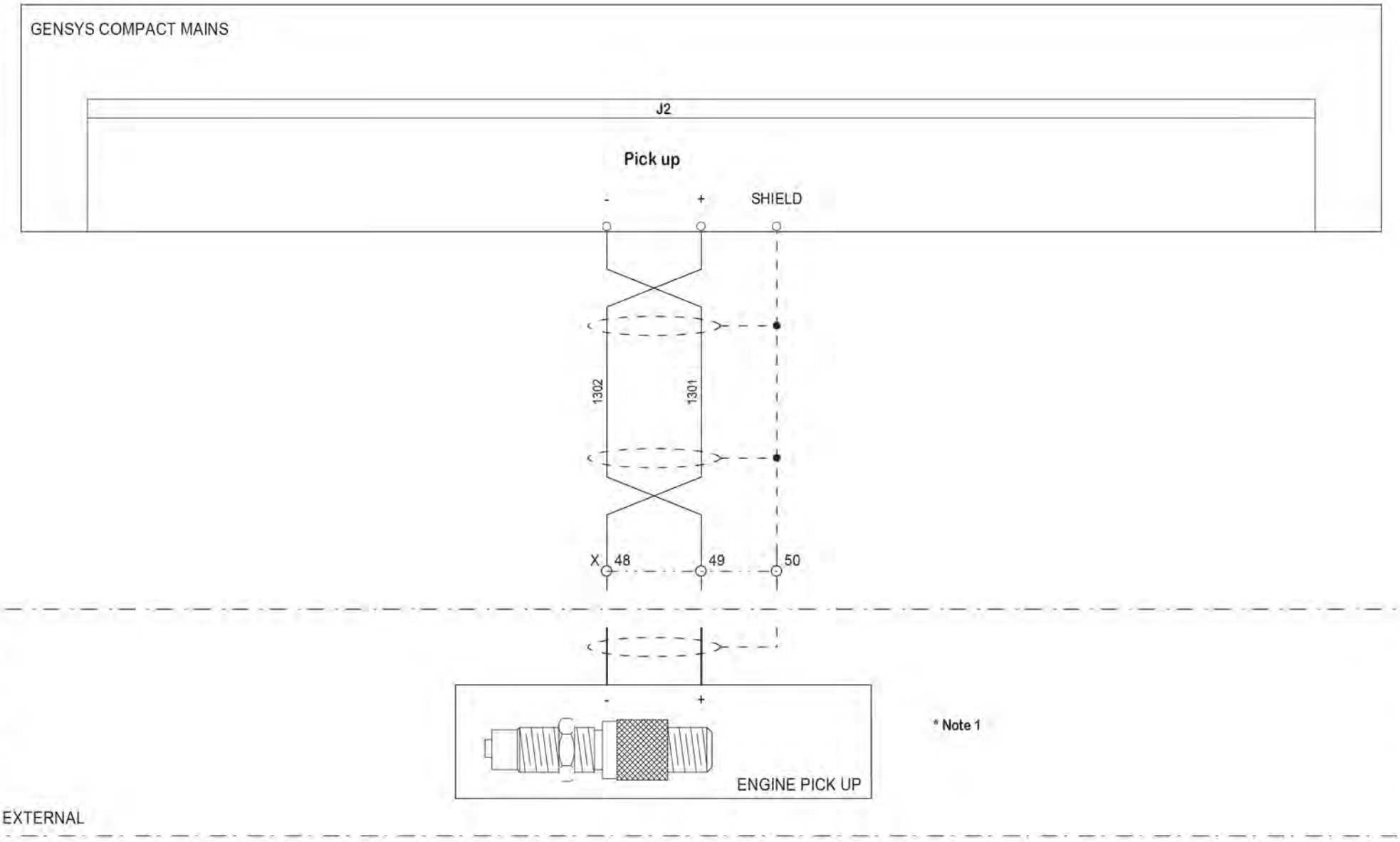


* Note1: Default functions, adjustable via PC software

** Note2: Inverted logic can be used to prevent mains breaker opening when powering off the module

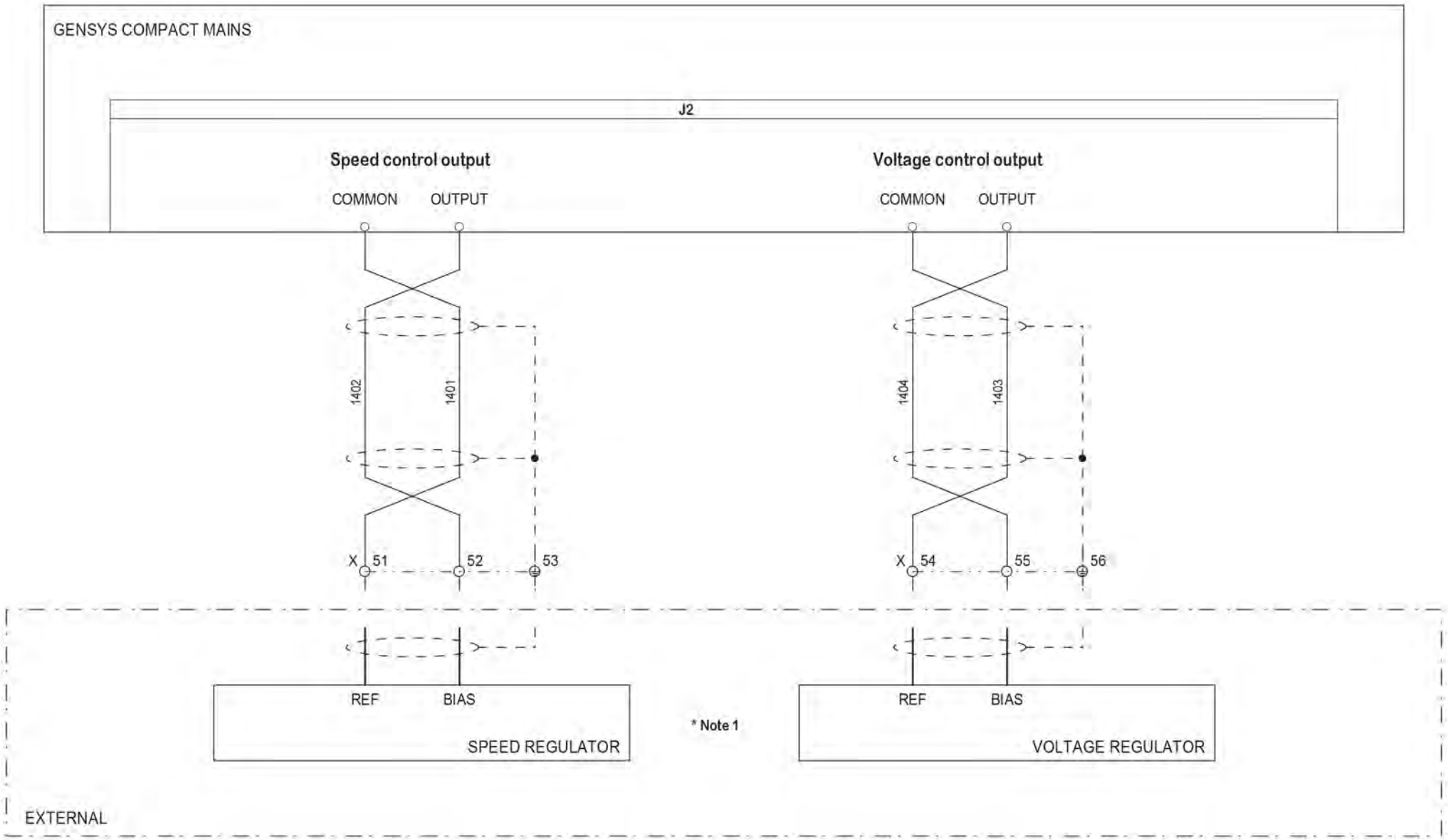
Created: 17/03/2022						GENSYS COMPACT MAINS HMI / CORE STANDARD WIRING SCHEMATICS	Breaker control
Drawing n°: A56-MAINS-00 / 10 - DWG - 001							PAGE 12
Drawn: DB	A	19/05/2019	FIRST RELEASE	DB			11 13
	REVISION	DATE	MODIFICATION	DRAWN			

GENSYS COMPACT MAINS



* Note1: Refer to the engine technical sheet to set the number of teeth

	Created: 17/03/2022					GENSYS COMPACT MAINS HMI / CORE STANDARD WIRING SCHEMATICS	Speed sensing
	Drawing n°: A56-MAINS-00 / 10 - DWG - 001						PAGE 13
	Drawn: DB	A	19/05/2019	FIRST RELEASE	DB		◄ 12 14 ►
		REVISION	DATE	MODIFICATION	DRAWN		



* Note1: Settings vary upon the type of regulator used. Refer to the technical sheet for more information

Created: 17/03/2022						GENSYS COMPACT MAINS HMI / CORE STANDARD WIRING SCHEMATICS	Speed & voltage control
Drawing n°: A56-MAINS-00 / 10 - DWG - 001							PAGE 14
Drawn: DB	A	19/05/2019	FIRST RELEASE	DB			13 15
	REVISION	DATE	MODIFICATION	DRAWN			

NOT USED

GENSYS COMPACT MAINS

CAN bus connection

J2

CAN 2

0V CAN L CAN H RES

1601 1602 1603 1603

Distance between node and module should not exceed 30 centimeters

1601 1602 1603

X 57 58 59 60

TO ENGINE J1939 ECU

*** Note 1**

1601

1602

120Ω ¼W *** Note 1**

1603

COUPLER EXT DI/DO

OVERFL
MS
RUN
BUS OFF
NS
CONNECT
I/O

BUS

GND
CAN L
SHIELD
CAN H
N/C

24VDC

WAGO
750-347

24V 24V 0V 0V

24 0

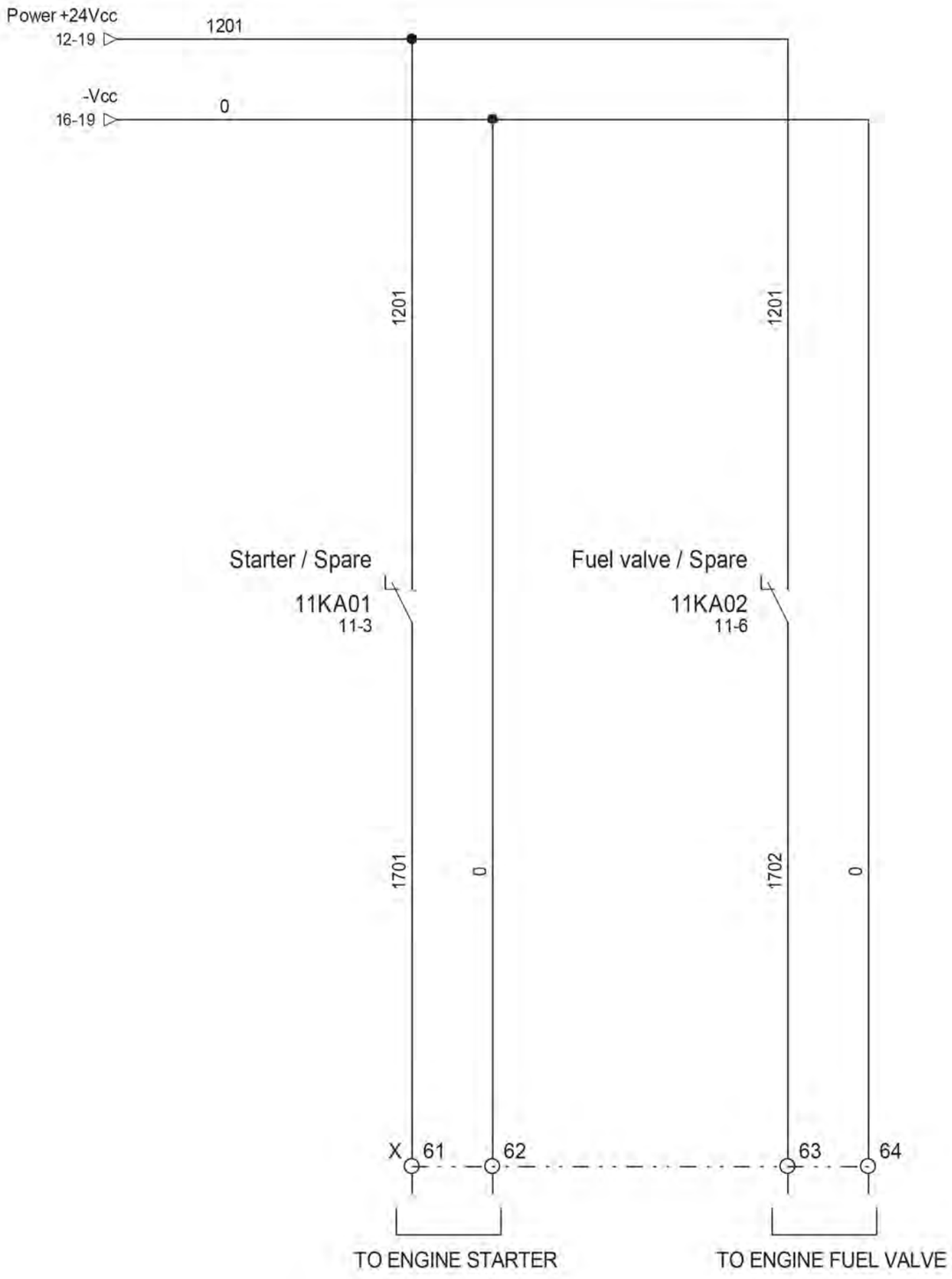
Module +Vcc
10-19

-Vcc
12-19

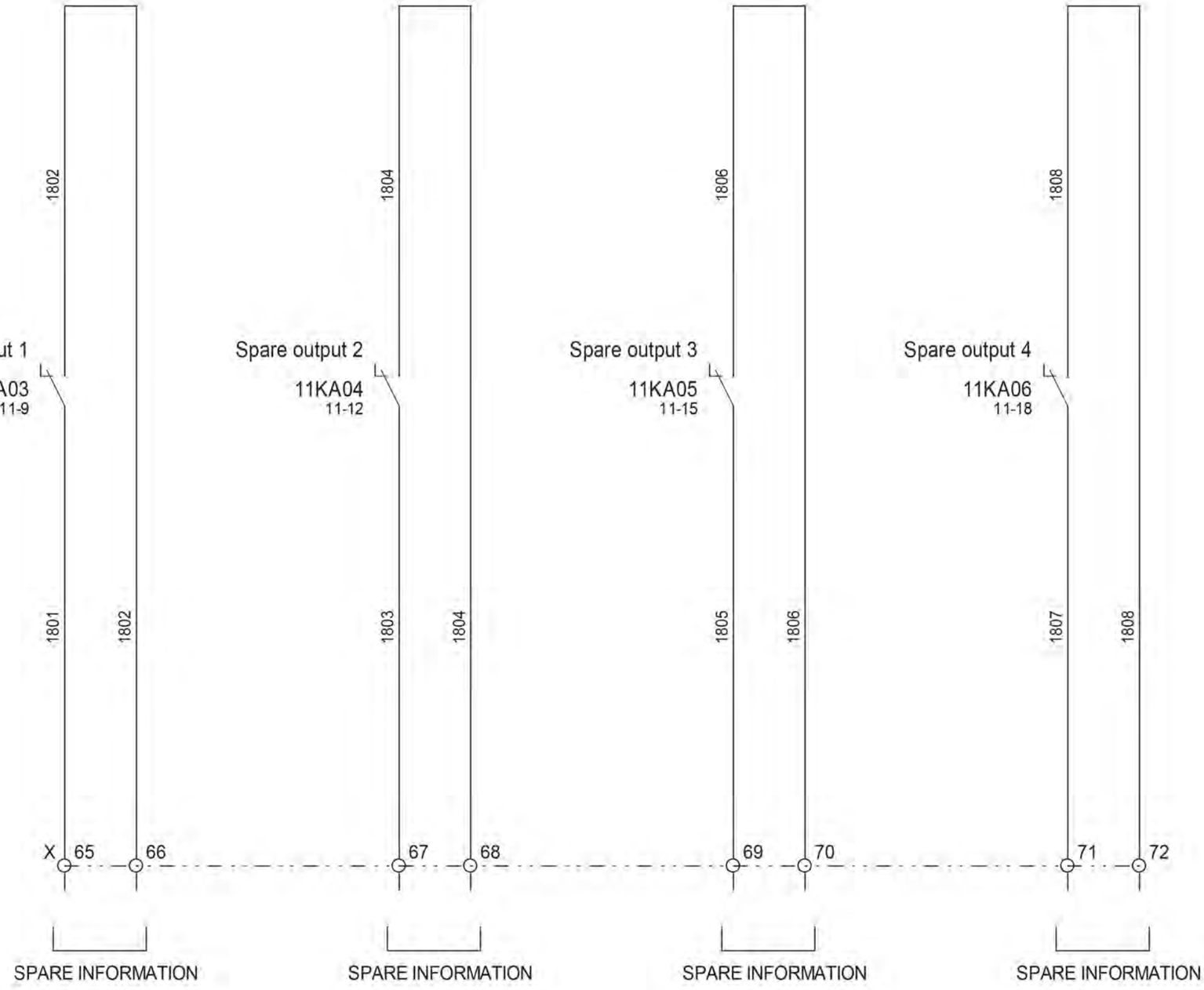
-Vcc
17-2

*** Note1: Bus end 120-ohm resistor to be placed between CAN L and CAN H terminal on last equipment only**

Created: 17/03/2022					PAGE 16
Drawing n°: A56-MAINS-00 / 10 - DWG - 001				GENSYS COMPACT MAINS HMI / CORE STANDARD WIRING SCHEMATICS	CAN 2 connection
Drawn: DB	A	19/05/2019	FIRST RELEASE		◄ 15 17 ►
	REVISION	DATE	MODIFICATION	DRAWN	



Created: 17/03/2022					GENSYS COMPACT MAINS HMI / CORE STANDARD WIRING SCHEMATICS
Drawing n°: A56-MAINS-00 / 10 - DWG - 001					Engine control
Drawn: DB	A	19/05/2019	FIRST RELEASE	DB	PAGE 17 (16 / 18)
	REVISION	DATE	MODIFICATION	DRAWN	



Created: 17/03/2022					GENSYS COMPACT MAINS HMI / CORE STANDARD WIRING SCHEMATICS
Drawing n°: A56-MAINS-00 / 10 - DWG - 001					Digital output terminals
Drawn: DB	A	19/05/2019	FIRST RELEASE	DB	PAGE 18 ◄ 17 ►
	REVISION	DATE	MODIFICATION	DRAWN	