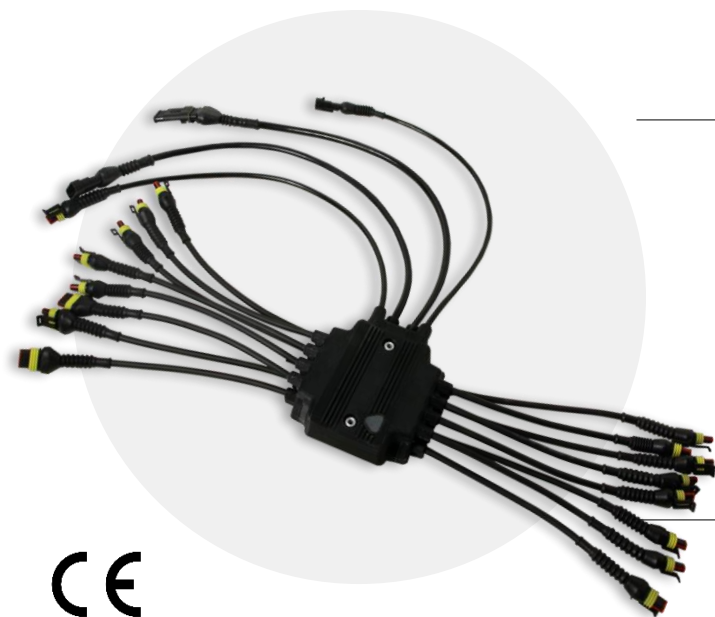




SPN3

CONTROLLER



CE

- ECU which can handle up to 8 inputs and up to 8 outputs
- Can be implemented in a CAN-BUS network as SLAVE module
- Separately disposed resources
- Polyurethane resin case

TECHNICAL FEATURES

MASTER CODE		SPN3
POWER SUPPLY		9-36 VDC / CURRENT CONSUMPTION 25 mA AT 24 VDC (STAND BY MODE)
INPUT	TOTAL 8	4 UNIVERSAL INPUTS 4 DIGITAL INPUTS
OUTPUT	TOTAL 8	8 PWM / DIGITAL OUTPUTS
CAN BUS	1 PORT	2.0B COMPLIANT - (11, 29 BIT) - ISO 11898 - UP TO 1MBIT/S
CAN BUS PROTOCOLS		CAN OPEN (CIA DS401 DEVICE PROFILE FOR GENERIC I/O MODULE, WITH DS306 EDS FILE) ON REQUEST: SAE J1939 - ISO 11783 (ISO BUS) - FMS
CONNECTIONS PORT		20 2 AMP SUPERSEAL 6 PIN 10 AMP SUPERSEAL 2 PIN 8 AMP SUPERSEAL 3 PIN
WORKING TEMPERATURE		-40°C +80°C
CASE		ENCAPSULATED IN PUR RESIN - SELF-EXTINGUISHING UL94 (V0)



(25/06/2025) - 1



SPN3

CONTROLLER

ELECTRONIC FEATURES

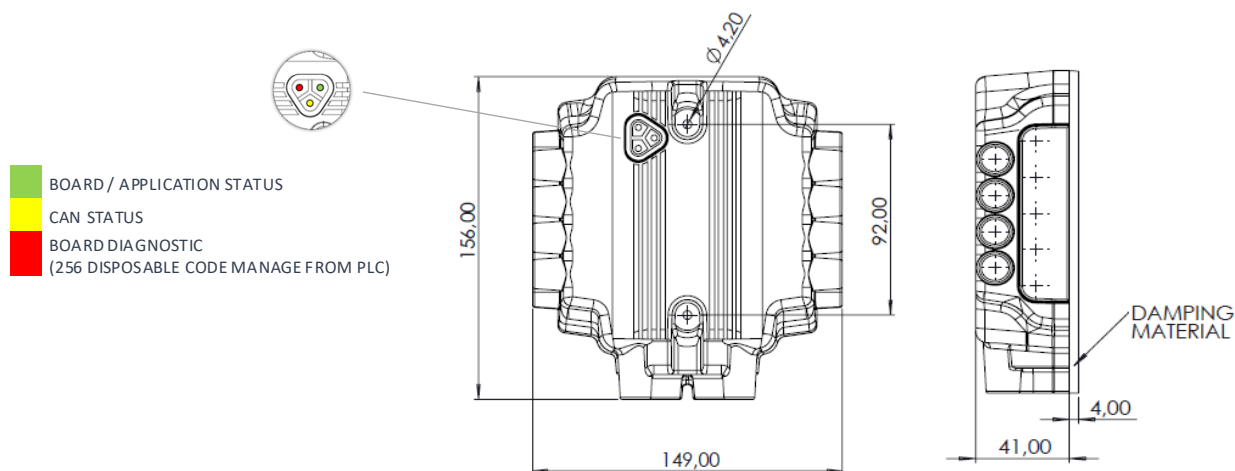
SLAVE USAGE	EDS FILE
MASTER USAGE	STANDARD C PROGRAM LANGUAGE
PROGRAMMING	FIRMWARE UPLOAD BY CAN BUS WITH ALOADER SOFTWARE TOOL
CYCLE TIME	50 ms

STANDARDS

ELECTROMAGNETIC EMISSIONS	EN 61000-6-4// EN 55011 (RF RADIATE)
ELECTROMAGNETIC IMMUNITY	EN 61000-6-2// EN 61000-4-2/3/4/6
IP	BOX: IP68; CONNECTORS: IP67
MTTFd	55,98 YEARS CALCULATED ACCORDING TO THE IEC61709 (SIEMENS SN29500), WITH ENVIRONMENTAL FACTORS 3K7 (IEC60721)
PERFORMANCE AND SAFETY INTEGRITY LEVEL	PLc – SIL1 (SINGLE-CHANNEL INTERNAL SCHEME)

IN ACCORDANCE WITH THE EN50498 THE DEVICE MEETS THE TECHNICAL SPECIFIC REQUIREMENTS OF 2004-104 DIRECTIVE (AUTOMOTIVE). THE DEVICE IS EMC 2004/108 COMPLIANT.

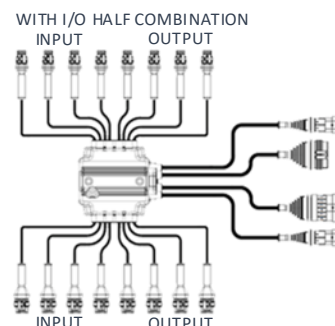
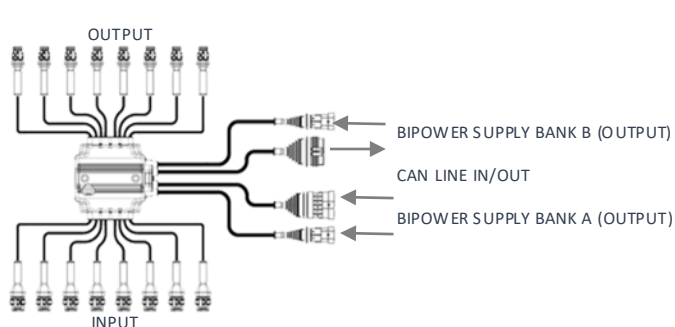
SIZE (mm)





SPN3

CONTROLLER



CODE TABLE

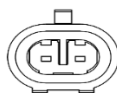
INPUT		OUTPUT BANKS POWER CONNECTIONS			OUTPUTS							
BASIC VERSION	4 UNIVERSAL INPUT <u>4÷20 mA (0÷25 mA)</u> <u>0÷5 V</u> <u>0÷10 V</u> <u>0÷40 V</u> <u>HIGH SIDE INPUT</u> <u>LOW SIDE INPUT</u>	EXTERNAL SUPPLY BY MAIN POSITIVE PIN 1 CAN LINE	EXTERNAL SUPPLY BY SAFETY LINE PIN 6 CAN LINE	OPT 3	8 HIGH SIDE OUTPUTS – IN TWO INDIPENDENT BANKS							
		A, B		1	BANK A				BANK B			
			A, B	2	DIGIT PWM	RATIO	RELAY	OPT. 1	DIGIT PWM	RATIO	RELAY	OPT. 2
		A	B	3	4	0	0	A	4	0	0	A
					3	0	1	B	3	0	1	B
					2	1	0	C	2	1	0	C
					2	0	2	D	1	0	2	D
					1	1	1	E	0	1	1	E
					0	2	0	F	0	2	0	F
					0	1	2	G	0	1	2	G
					HIGH SIDE OUTPUTS							
				SINGLE OUT MAX CURR: 5A				BANK TOTAL CURRENT: 8A				

BASIC AND BIPOWER VERSION

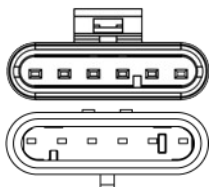
BIPOWER VERSION	SUPPLEMENTARY BIPOWER PLUG	IMPORTANT: BIPOWER CONNECTION EXCLUDES THE SUPPLY (A/B BANKS) BY DOUBLE CAN LINE (PIN1/6)				
		BANK A BIPOWER – BANK B SUPPLIED BY PIN 1 CAN LINE		1P1		
		BANK A BIPOWER – BANK B SUPPLIED BY PIN 6 CAN LINE		1P2		
		BANK B BIPOWER – BANK B SUPPLIED BY PIN 1 CAN LINE		2P1		
		BANK B BIPOWER – BANK B SUPPLIED BY PIN 6 CAN LINE		2P2	SINGLE OUT MAX CURR: 5A	BANK TOTAL CURRENT: 25A
		BANK A AND B BIPOWER		3P		



OUTPUT	
PIN	DESCRIPTION
1	POSITIVE
2	OUTPUT (PWM/D: HIGH SIDE)



BIPOWER SUPPLY	
PIN	DESCRIPTION
1	POSITIVE EXTERNAL POWER SUPPLY
2	GND EXTERNAL POWER SUPPLY



DOUBLE CAN LINE IN/OUT	
PIN	DESCRIPTION
1	POWER SUPPLY
2	LINE H (CANBUS)
3	NEGATIVE
4	LINE L (CAN BUS)
5	SAFETY LINE
6	EXTERNAL SUPPLY BY SAFETY LINE



INPUT	
PIN	DESCRIPTION
1	POSITIVE
2	INPUT (A/D:L-H)
3	GND



NOTE