EPEC SL84 SAFETY CONTROL UNIT

SL84 is a general purpose controller intended for typical machine safety functions, for example prevention of unexpected movement or safety related stop-function. The unit is functional safety certified * up to performance level PLd Cat. 2 according to IEC 13849-1:2015 and SIL 2 according to IEC 61508:2010 and IEC 62061:2005.
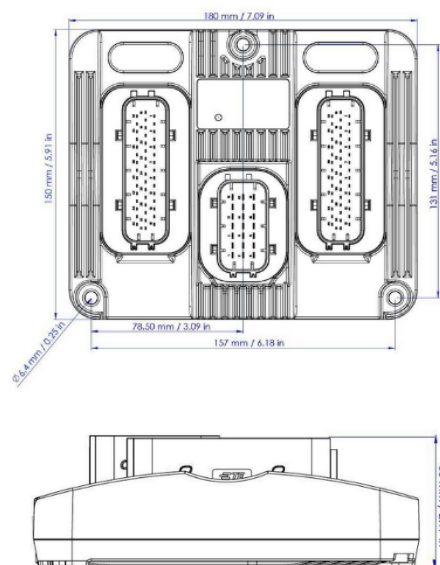
SL84 is utilizing up-to-date safety technology with32-bit multi-core lockstep safety CPU and memory protection for the application. The unit is designed for extreme environments, the full aluminum enclosure and LEAVYSEAL connectors grants IP69k protection rating, shocks and vibrations up to 100G and excellent EMI / EMC performance.

Together with SL84 controller Epec offers a set of pre-certified safety libraries and SW tools to optimize customers machine time to market.

TECHNICAL FEATURES

Safety performance up to SIL2 (IEC 61508:2010 and IEC 62061:2005) and PL d Cat. 2 (ISO 13849-1:2015), as a stand-alone controller *
Processor: 32 bit multicore CPU with lock-step and memory protection
Flash memory: 8 Mbyte
RAM: 512 kbyte
Non-volatile RAM 16 kbyte
PLCopen application size: up to 1,8 Mbyte
CAN: 2
CAN wake-up
I/O: 69 (35 inputs + 34 outputs)
26 GND pins
IP class: IP69k
Temperature range: -40 ... + 85 °C / -40 ... +185 °F
Connectors: 1 x LEAVYSEAL 21 pins + 2 x LEAVYSEAL 46 pins
CODESYS version: 3.5 SP10
CODESYS V3 Safety SIL 2 programming
Supported CAN protocols: CANopen, CANopen Safety, SAEJ1939
CANopen Safety protocol for safety-related communication according to EN50325-5
Extensive set of pre-certified PLCopen libraries for safety related applications
Three-colored diagnostic LED for quick status check and fault detection

APPROVALS

Symbol / Name	Explanation
CE	This product complies with the requirements set in the CE Standard.
E17	This product is certified with normal automotive (E17) EMC (electromagnetic compatibility) standards.

VARIANTS & MANUALS

Ordering code	E30FSL84-022	E30FSL84-020
Technical Manual ID	MAN000728	MAN000728
Safety manual	MAN000730	MAN000730
CAN	2	2
5 V REF	2	2
PWM / DO / CM 3 A	20	20
DO / CM 5 A	4	4
DO 3 A	8	8
DO (GND) 3 A	2	2
AI/DI (0-5 V / 0-22 mA configurable by software)	15	15
PI/DI (rising threshold 3,3 V, falling threshold 1,7 V)	10	10
PI/DI (threshold 2,6 V)	6	6
DI pins for defining communication parameters PI/DI (threshold 2,6 V)	4	4
CODESYS version	3.5 SP10	3.5 SP10

YOUR CHALLENGE, OUR INSPIRATION.

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