



DRAULICS

**SMART PU – HOME Lift
machine management**



SMART PU HI . MACHINE MANAGEMENT



Our patented SMART POWER UNIT technology offers to manufacturers a one-stop-shop solution for small Hydraulic HOME Lift. It reduces TCO due to a **simplified electric and hydraulic circuit**, using a fieldbus connected Hydraulic Power Pack with a Safety Compliant built in PLC.

The solution is ready for EN 81-21 and EN81-50

The solution for small elevators consist of:

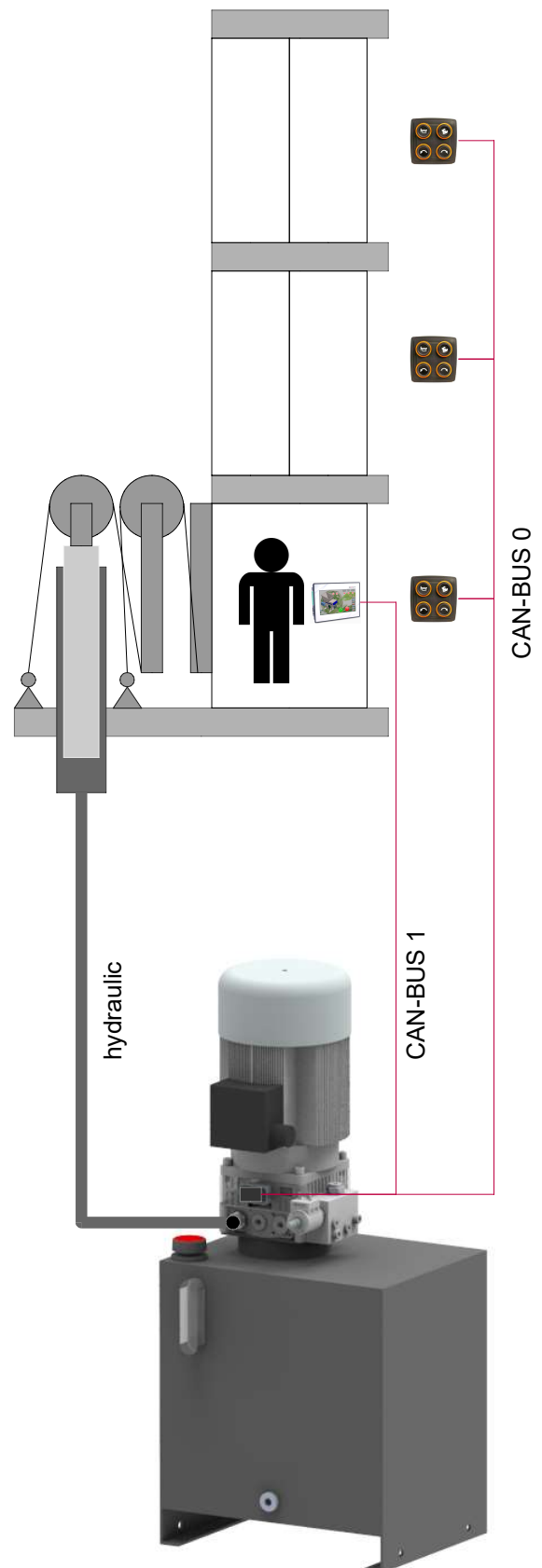
- SMART POWER UNIT
 - Hydraulic power pack with valves
 - Embedded SIL 2 programmable PLC
 - Embedded pressure Sensor
 - WiFi – CAN – Ethernet
- CAN BUS KEYBOARD for the car panel
- CAN BUS digitiser for "floor panel" o CAN BUS Keyboard

The Embedded PLC can be directly connected to:

- car position sensor (CANBUS),
- car panel
- car LED lights (up to 50W)
- car level sensors
- door locks
- IR door barriers
- Floor panel CAN digitiser

Features:

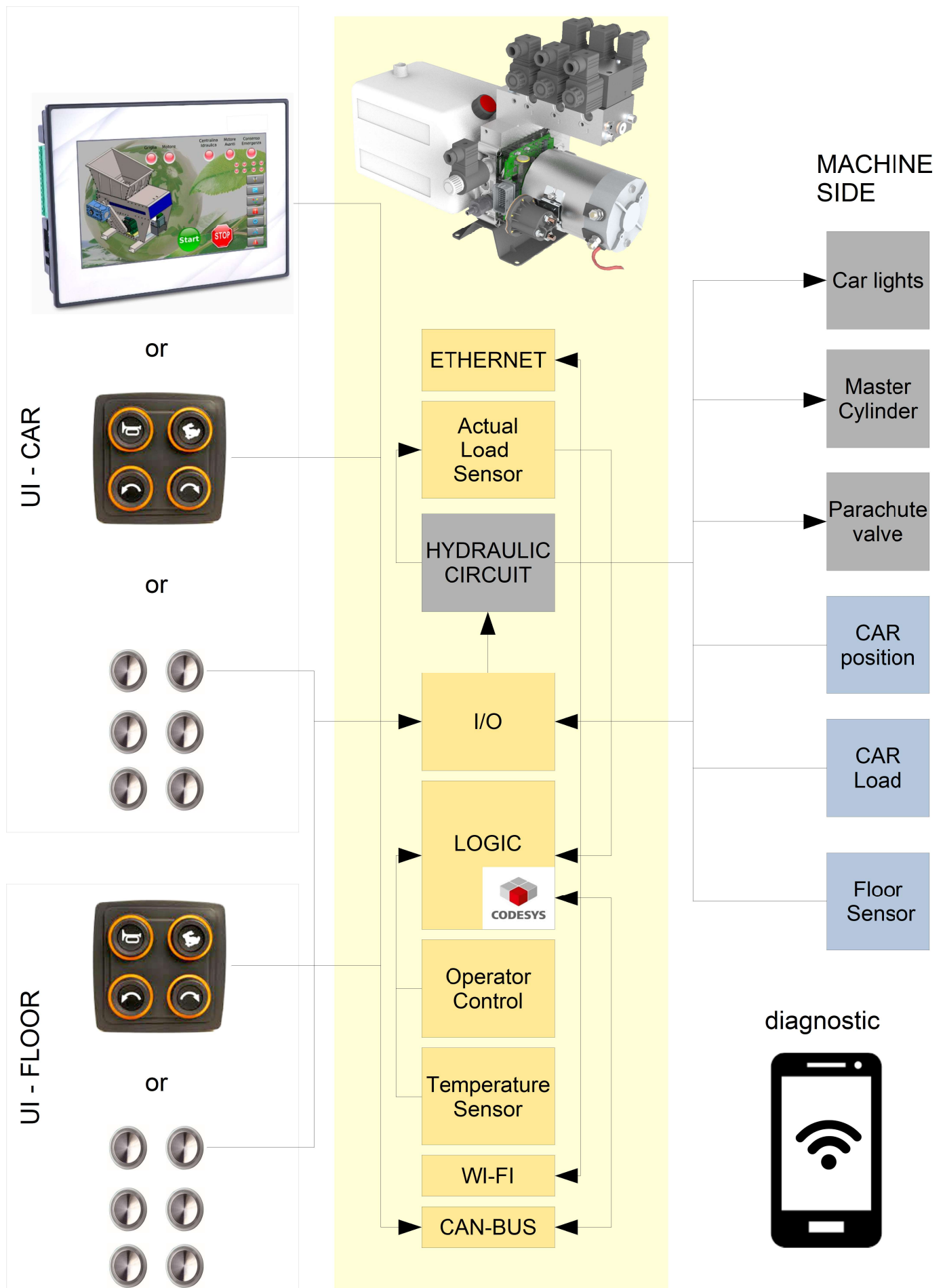
- proportional valve for "soft start" and "soft stop" and accurate positioning
- optional UMD - Unattended Movements Detection and prevention through hydraulic energy storage
- Remote Diagnostic
- Hand Pump
- in car LED direct Drive with auto dim
- 5 – 20 l/min flow



Hydraulic schematic diagram of a car elevator system. The diagram shows a main pump (02) driven by an E-Motor (01) connected to a manifold (03). The manifold branches into three main sections. The top section includes a hand pump (08) and a check valve (10). The middle section includes a proportional valve (06) and a pressure relief valve (05). The bottom section includes a hand pump (08) and a check valve (10). The system also features a hydraulic accumulator (17), a car position sensor (16), a load sensor (13), and a UMD seat valve (12). The diagram is divided into three main sections by dashed lines, each with its own pressure (P) and temperature (T) indicators. A legend at the bottom right identifies the components by number.

10	Check Valve	20	-
09	Block with check valve	19	emergency and BLOCK test
08	Hand-Pump Cartridge	18	Flow Limiter
07	Hand-Pump Block	17	Hydraulic Accumulator
06	Proportional valve	16	Car Position Sensor
05	Pressure Relief	15	Elevator Cylinder
04	Main Check Valve	14	BLOCK valve
03	SMART Manifold & PLC	13	Load Sensor
02	Pump	12	UMD seat valve
01	E-Motor	11	UMD bloc

SMART PU HI BLOCK UNIT



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