Control Panel VARAN
ETV 0555

with 5.7" VGA TFT LCD color display
8 digital inputs
8 digital outputs

The ETV Control Panel with EDGDE Technology combines control, operation and visualization in a single unit. Local as well as decentralized I/O systems can be connected over the VARAN bus and therefore not bound to a specific topology when constructing your system. The available interface connections can be programmed completely from the application. A microSD card serves as the storage medium for the operating system, application and application data. Naturally, the panel can also be configured with the LASAL SCREEN Editor.

Performance Data

Processor		EDGE Technology X86 compatible
Internal cache		32-kbyte L1 cache 256-kbyte L2 cache
BIOS		AMI
Internal program and data memory (DDR2 RAM)		64-Mbyte
Internal remnant data memory		512-kbyte
Internal storage device (IDE)		512-Mbyte microSD or 1-Gbyte microSD
Interfaces		2x USB Type A 2.0 (full speed 12 Mbit/s) 1x USB Type Mini B 1.1 1x Ethernet 1x VARAN Out (Manager) 1x CAN bus
Internal interface connections and devices		1x TFT LCD color display 1x Touch
Control panel		4-wire touch screen (analog resistive)
Display		5.7" TFT color display 640 x 480 pixels
Data buffer		yes

Signal generator		no
Real-time clock		yes
Cooling		passive (fanless)

Electrical Requirements

Supply voltage		typically +24 V DC
	minimum +18 V DC	maximum +30 V DC
Current consumption Power supply +24 V	typically 335 mA (without externally connected devices)	maximum 610 mA (with externally connected devices)
Inrush current		maximum 28 A for 20 µs

Terminal

Dimensions		180 x 135 x 40.4 mm (W x H x D)
Material		front plate: 3.5 mm anodized aluminum
Weight		650 g

Control Unit

Touch panel		analog resistive film-glass touch panel
Resolution		12-bit (4096 x 4096)

Display

Type		5.7" LCD color display
Resolution		VGA, 640 x 480 pixels
Color depth		18-bit RGB (262K colors)
LCD mode		TN/normal white
LCD polarizer		transmissive
Pixel size		0.18 mm x 0.18 mm
Active surface		115.2 mm x 86.4 mm
Backlight		LED
Contrast		typically 600 : 1
Brightness		typically 350 cd/m²
Viewing angle CR > 10 from		left, right, below 75°, above 60°

Digital Outputs

Number		8
Short-circuit proof		yes
Maximum continuous current load allowed per channel		2 A
Maximum total current (all 8 channels)		6 A (100 % of on time)
Voltage drop over power supply (output active)		≤ 1 V
Residual current (output inactive)		≤ 12 µA
Turn-on delay		< 400 µs
Turn-off delay		< 400 µs
Maximum breaking energy braking energy of inductive loads		1 channel 0.12 [Joules]

Digital Inputs

Number		8
Input voltage	typically +24 V	maximum +30 V
Signal level	low: < +4.5 V	high: > +14 V
Switching threshold	typically +11 V	
Input current	typically 5 mA at +24 V	
Input delay	typically 5 ms	

Article Number and Miscellaneous

Article number		12-230-0555 (512-Mbyte microSD card) 12-230-0555-1 (1-Gbyte microSD card)
Hardware version		1.x
Standard		UL 508 (E247993)

Environmental Conditions

Storage temperature		-10 ... +85 °C
Environmental temperature		0 ... +50 °C
Humidity		10-90 %, non-condensing
EMC stability		EN 61000-6-2: EMC resistance noise emission
Vibration tolerance	EN 60068-2-6	2-9 Hz: amplitude 3.5 mm 9-200 Hz: 1 g (10 m/s²)
Shock resistance	EN 60068-2-27	150 m/s²
Protection type	EN 60529: protected through the housing	front: IP54 cover: IP20

Notes