Type: Multi-line 300
DU 300 – Display Unit

**Technical specifications**

* Auxiliary supply: Nominal: 12/24V DC (8...36V DC) max. 12W consumption.
  Cranking dropout: Able to survive 0V for 50ms when dropping from at least 8V DC.
  Reverse polarity protected.

* Relay outputs: 30V DC / 1A resistive.
  Voltage withstand: ±36V DC

* Galvanic separation: Between power supply input and other I/O’s: 600V, 50Hz, 60 s.
  Between relay groups and other I/O’s: 600V, 50Hz, 60 s.
  Between EtherCAT ports and other I/O’s: 600V, 50 Hz for 60 s.

  Note: “Other I/O’s” includes frame ground.

**Type test specifications**

| Temperature: | 15...30°C (Reference)  
-20...70°C (operating)  
-30...80°C (storage) | Tested according to: | IEC 60068-2-1/2-2  
IEC60255-1 |
| Humidity: | 97% RH Cyclic  
93% RH Steady state | IEC 60068-2-30, test Db.  
IEC 60068-2-78 test Cab.  
IEC 60255-1 |
| Change of temperature: | 70°C ....-40°C 1°/minute | IEC 60255-1  
IEC 60068-2-14, test Nb. |
| Operating altitude: | 0-4000m | Refer to module specification for altitude de-rating above 2000m |
| Vibration: | Operation:  
3...8Hz: 17mmpp  
8...100Hz: 4g  
100...500Hz 2g | IEC 60068-2-6 & IACS UR E10  
IEC 60255-21-1 (Class 2)  
IEC 60255-21-1 (Class 2) |
| | Response:  
10...58.1Hz 0.15mmpp  
58.1...150Hz 1g | |
| | Endurance:  
10...150Hz 2g | IEC 60255-21-3 (Class 2) |
| | Seismic:  
3...8,15HZ 15mmpp  
8,15HZ... 35HZ 2g | |
### Type test specifications

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| **Shock:** | Base mounted:  
10g, 11msec. half sine  
30g, 11msec. half sine  
50g, 11msec. half sine  
Tested with 3 impacts in each direction in all 3 axes. Total 18 impacts per test. | IEC 60255-21-2 Response (Class 2)  
IEC 60255-21-2 Endurance (Class 2)  
IEC 60068-2-27, test Ea. |
| **Bump** | 20g, 16msec. half sine | IEC 60255-21-2 (Class 2) |
| **Safety:** | Installation Cat III 50V  
Pollution degree 2 | EN/IEC 60255-27 |
| **Load dump:** | 1 pulse of 123V/1Ω/100ms  
1 pulse of 174V/8Ω/350ms | ISO 7637-2 (pulse 5a) |
| **EMC:** |  | EN 61000-6-3  
EN 61000-6-2  
IEC/EN 60255-26  
IEC 60533 power distr. zone  
IACS UR E10 power distr. zone |
| **Flammability:** | All plastic parts are self-extinguishing to UL94-V0 | UL94  
IEC/EN 60695-11-5 (Needle flame test) |
| **Ingress protection:** | Front: IP65  
Back: IP20 | IEC/EN 60529 |

*) Routine tested on all units according to specifications. Remaining specifications are tested regularly by test sampling.