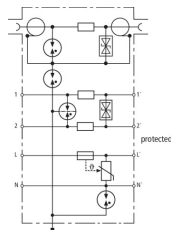


## DVR BNC RS485 230 (928 440)

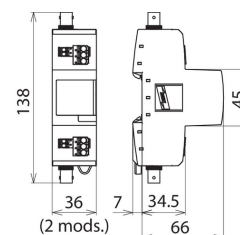
- Compact solution for protecting three interfaces in a single device (BNC, RS485, 230 V)
- Interruption of the load circuit in case of a fault (red fault indication)
- For installation in conformity with the lightning protection zone concept at the boundaries from 0<sub>A</sub> - 2 and higher



Figure without obligation



Basic circuit diagram DVR BNC RS485 230



Dimension drawing DVR BNC RS485 230

Compact 3-in-1 surge arrester for protecting analogue camera systems. Protection of the video signal (BNC connection), a data signal (RS485) and a voltage supply (230 V a.c.). Direct plug-in technology allows fast conductor connection without tools. Easy replacement of the arrester is ensured by the integrated terminal units which can be released and then removed from the enclosure. Integrated overload indication (230 V).

### Video (BNC)

Type	DVR BNC RS485 230
Part No.	928 440
SPD class	<b>TYPE 2 P2</b>
Nominal voltage (d.c.) ( $U_N$ )	5 V
Max. continuous operating voltage (d.c.) ( $U_C$ )	6.4 V
Nominal current ( $I_L$ )	0.1 A
D1 Lightning impulse current (10/350 $\mu$ s) per line ( $I_{imp}$ )	1 kA
D1 Lightning impulse current (10/350 $\mu$ s) shield-PG ( $I_{imp}$ )	2 kA
C2 Nominal discharge current (8/20 $\mu$ s) per line ( $I_n$ )	5 kA
C2 Nominal discharge current (8/20 $\mu$ s) shield-PG ( $I_n$ )	10 kA
Voltage protection level line-shield for $I_n$ C2 ( $U_p$ )	$\leq 40$ V
Voltage protection level shield-PG for $I_n$ C2 ( $U_p$ )	$\leq 650$ V
Voltage protection level line-shield at 1 kV/ $\mu$ s C3 ( $U_p$ )	$\leq 15$ V
Voltage protection level shield-PG at 1 kV/ $\mu$ s C3 ( $U_p$ )	$\leq 550$ V
Insertion loss at 80 MHz (75 ohms)	$\leq 0.4$ dB
Insertion loss at 300 MHz (75 ohms)	$\leq 3.0$ dB
Return loss at 20 MHz (75 ohms)	$\geq 20$ dB
Series resistance per line	4.7 ohms
Capacitance line-shield (C)	$\leq 35$ pF
Capacitance shield-PG (C)	$\leq 30$ pF
Connection (input / output)	BNC socket / BNC socket

**Data (RS485)**

Type Part No.	DVR BNC RS485 230 928 440
SPD class	TYPE 2 Pt
Nominal voltage (d.c.) ( $U_N$ )	5 V
Max. continuous operating voltage (d.c.) ( $U_C$ )	8 V
Max. continuous operating voltage (a.c.) ( $U_C$ )	5.6 V
Nominal current ( $I_L$ )	0.5 A
D1 Lightning impulse current (10/350 $\mu$ s) per line ( $I_{imp}$ )	1 kA
D1 Total lightning impulse current (10/350 $\mu$ s) ( $I_{imp}$ )	2 kA
C2 Nominal discharge current (8/20 $\mu$ s) per line ( $I_n$ )	5 kA
C2 Total nominal discharge current (8/20 $\mu$ s) ( $I_n$ )	10 kA
Voltage protection level line-line for $I_n$ C2 ( $U_p$ )	$\leq 45$ V
Voltage protection level line-PG for $I_n$ C2 ( $U_p$ )	$\leq 600$ V
Voltage protection level line-line at 1 kV/ $\mu$ s C3 ( $U_p$ )	$\leq 15$ V
Voltage protection level line-PG at 1 kV/ $\mu$ s C3 ( $U_p$ )	$\leq 550$ V
Cut-off frequency line-line ( $f_c$ )	100 MHz
Series resistance per line	1.8 ohms
Capacitance line-line (C)	$\leq 25$ pF
Capacitance line-PG (C)	$\leq 20$ pF
Connection (input / output)	spring / spring
Cross-sectional area (solid)	0.2-1.5 mm <sup>2</sup>
Cross-sectional area (flexible)	0.2-1.5 mm <sup>2</sup>

**Voltage supply (230 V)**

Type Part No.	DVR BNC RS485 230 928 440
SPD class	type 2 / class II
Nominal voltage (a.c.) ( $U_N$ )	230 V (50 / 60 Hz)
Max. continuous operating voltage (a.c.) [L-N] ( $U_C$ )	255 V (50 / 60 Hz)
Max. continuous operating voltage (a.c.) [N-PE] ( $U_C$ )	255 V (50 / 60 Hz)
Nominal current ( $I_L$ )	10 A
Nominal discharge current (8/20 $\mu$ s) ( $I_n$ )	5 kA
Max. discharge current (8/20 $\mu$ s) ( $I_{max}$ )	10 kA
Voltage protection level [L-N] ( $U_p$ )	$\leq 1.5$ kV
Voltage protection level [N-PE] ( $U_p$ )	$\leq 1.5$ kV
Follow current extinguishing capability [N-PE] ( $I_{FI}$ )	100 A <sub>rms</sub>
Response time [L-N] ( $t_A$ )	$\leq 25$ ns
Response time [N-PE] ( $t_A$ )	$\leq 100$ ns
Max. mains-side overcurrent protection	MCB B16
Short-circuit withstand capability in case of max. mains-side overcurrent protection ( $I_{SCCR}$ )	1 kA <sub>rms</sub>
Temporary overvoltage (TOV) [L-N] ( $U_T$ ) – Characteristic	335 V / 5 sec. – withstand
Temporary overvoltage (TOV) [L-N] ( $U_T$ ) – Characteristic	440 V / 120 min. – safe failure
Temporary overvoltage [N-PE] ( $U_T$ ) – Characteristic	1200 V / 200 ms – safe failure
Fault indication (interruption load circuit L-L')	red
Cross-sectional area (solid)	0.2-2.5 mm <sup>2</sup>
Cross-sectional area (flexible)	0.2-2.5 mm <sup>2</sup>

**General parameters**

Type Part No.	DVR BNC RS485 230 928 440
Operating temperature range ( $T_U$ )	-40 °C ... +80 °C
Enclosure material	thermoplastic, yellow, UL 94 V-0
Degree of protection	IP 20
Capacity	2 mod(s), DIN 43880
Accessories (included in delivery)	unlocking tool for terminal units
Approvals	EAC
Weight	134 g
Customs tariff number (Comb. Nomenclature EU)	85363010
GTIN	4013364280809
PU	1 pc(s)

We reserve the right to introduce changes in performance, configuration and technology, dimensions, weights and materials in the course of technical progress. The figures are shown without obligation.