



10595E00

Power Supply Type 9143

- Intrinsically safe output [EEx ib] IIC
- Constant output voltage
- Galvanic isolation between output and power supply
- Power supply 24 V AC / DC or 85 ... 230 V AC
- Compact design
- Installation possible in Zone 2

STAHL

Basic function: The power supplies are used for the intrinsically safe operation of field devices e.g. 3- or 4-wire transmitters, solenoid valves, light barriers, controllers and more.

Selection table						
Version	Power supply	I.S. output			Ordering code	
		No-load voltage U_A	Nominal voltage U_N	Max. nominal current I_N		
I.S. power supply type 9143	24 V AC / DC	4.2 ... 5.8 V	4.0 ... 5.6 V	130 mA	9143/10-065-150-10.	
		4.2 ... 5.8 V	4.0 ... 5.6 V	160 mA	9143/10-065-200-10.	
		8.8 ... 9.6 V	8.7 ... 9.5 V	200 mA	9143/10-104-220-10.	
		9.5 ... 10.5 V	9.4 ... 10.4 V	180 mA	9143/10-114-200-10.	
		9.6 ... 11.9 V	9.5 ... 11.8 V	130 mA	9143/10-124-150-10.	
		12.6 ... 14.8 V	12.5 ... 14.7 V	45 mA	9143/10-156-065-10.	
		12.6 ... 14.8 V	12.5 ... 14.7 V	140 mA	9143/10-156-160-10.	
		14.8 ... 17.8 V	14.6 ... 17.6 V	35 mA	9143/10-187-050-10.	
	85 ... 230 V AC	4.2 ... 5.8 V	4.0 ... 5.6 V	160 mA	9143/10-065-200-20.	
		8.8 ... 9.6 V	8.7 ... 9.5 V	200 mA	9143/10-104-220-20.	
		9.5 ... 10.5 V	9.4 ... 10.4 V	180 mA	9143/10-114-200-20.	
		9.6 ... 11.9 V	9.5 ... 11.8 V	130 mA	9143/10-124-150-20.	
		12.6 ... 14.8 V	12.5 ... 14.7 V	45 mA	9143/10-156-065-20.	
		12.6 ... 14.8 V	12.5 ... 14.7 V	140 mA	9143/10-156-160-20.	
		14.8 ... 17.8 V	14.6 ... 17.6 V	35 mA	9143/10-187-050-20.	
		Add. to ordering code				
		Screw terminal				9143/.....s
		Spring clamp terminal				9143/.....k
Insulation displacement connectors				9143/.....q		

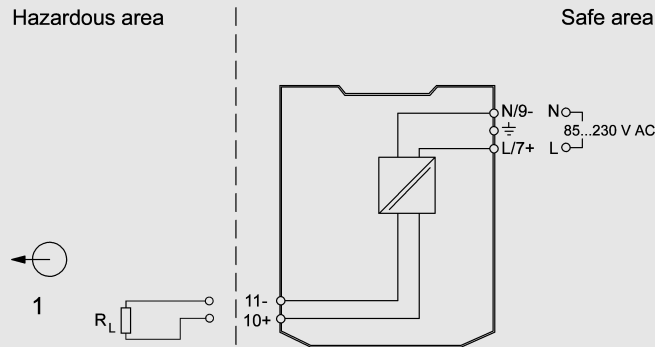
Technical Data					
Certificates	BVS 05 ATEX E 152X				
Other certificates	Russia (VNIIEF), Brazil (UL do Brasil), USA (FM)				
Explosion protection	⊕ II (2) GD [EEx ib] IIC/IIB and ⊕ II 3 G EEx nA II T4				
Installation	in Zone 2 and in the safe area				
Safe maximum values (CENELEC)	9143/10-...-...-0.	-065-200-	-104-220-	-114-200-	-124-150-
	max. voltage U_0	6.5 V	10.4 V	11.4 V	12.4 V
	max. current I_0	200 mA	220 mA	200 mA	150 mA
	max. power P_0	1.3 W	2.288 W	2.28 W	1.86 W
	max. external capacitance C_0 IIC	25 μ F	2.4 μ F	1.64 μ F	1.24 μ F
	max. external capacitance C_0 IIB	570 μ F	16.8 μ F	11.2 μ F	7.9 μ F
	max. external inductance L_0 IIC	0.82 mH	0.24 mH	0.16 mH	0.17 mH
	max. external inductance L_0 IIB	3.71 mH	1.5 mH	1.4 mH	2.08 mH
	Internal capacitance C_i	negligible			
	Internal inductance L_i	negligible			
	Insulation voltage U_m	250 V AC			
	9143/10-...-...-0.	-156-065-	-156-160-	-187-050-	-065-150-
	max. voltage U_0	15.6 V	15.6 V	18.7 V	6.5 V
	max. current I_0	65 mA	160 mA	50 mA	150 mA
	max. power P_0	1.014 W	2.496 W	0.935 W	0,975 W
	max. external capacitance C_0 IIC	0.497 μ F	--	0.27 μ F	25 μ F
	max. external capacitance C_0 IIB	3.03 μ F	3.03 μ F	1.64 μ F	570 μ F
	max. external inductance L_0 IIC	0.445 mH	--	0.06 mH	1,43 mH
	max. external inductance L_0 IIB	11.2 mH	0.351 mH	15.5 mH	6,25 mH
	Internal capacitance C_i	negligible			
	Internal inductance L_i	negligible			
	Insulation voltage U_m	250 V AC			
	Further information and combination of values, see certification.				



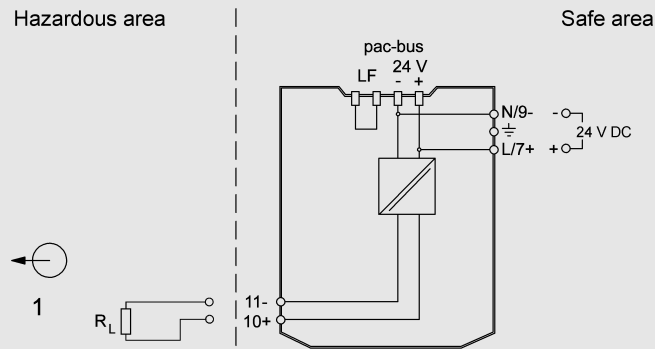
Technical Data					
Power supply	9143/10-...-...-10.	AC	DC		
	Nominal voltage U_N Voltage range Frequency range Polarity reversal protection Indication	24 V 20 V ... 28 V 48 Hz ... 62 Hz -- LED green	24 V 18 V ... 35 V -- yes LED green		
	9143/10-...-...-20.	AC			
	Nominal voltage U_N Voltage range Frequency range Indication	115 / 230 V 85 V ... 230 V 48 Hz ... 62 Hz LED green			
Power consumption	9143/10-...-...-0.	-065-200-	-104-220-	-114-200-	-124-150-
	$P_{24\text{ V DC}}^*$ [W] $P_{115\text{ V AC}}^*$ [VA] $P_{230\text{ V AC}}^*$ [VA]	2.6 W 2.3 VA 3.3 VA	5.0 W 4.0 VA 4.6 VA	4.6 W 3.7 VA 4.5 VA	3.3 W 2.8 VA 3.5 VA
	9143/10-...-...-0.	-156-065-	-156-160-	-187-050-	-065-150-
	$P_{24\text{ V DC}}^*$ [W] $P_{115\text{ V AC}}^*$ [VA] $P_{230\text{ V AC}}^*$ [VA]	1.5 W 1.8 VA 2.8 VA	4 W 4 VA 4.9 VA	2 W 2 VA 3.2 VA	1.1 W -- --
	* Power dissipation determined for nominal current condition.				
Current limitation	If the max. nominal current is reached the output voltage is set to 0 V.				
Galvanic isolation	Test voltage Output to power supply 1.5 kV				
Electromagnetic compatibility	tested under the following standards and regulations: EN 61326 (IEC/EN 61000-4-1...6 and 11; EN 55022 Class B) NAMUR NE 21 (IEC/EN 61000-4-1...6, 8 and 11; EN 55022 Class B)				
Ambient conditions	Ambient temperature	- 20 °C ... + 70 °C (horizontal) - 20 °C ... + 60 °C (vertical) (see instruction)			
	Storage temperature	- 40 °C ... + 80 °C			
	Relative humidity (no condensation)	< 85 % at $T_a > 40$ °C			
Mechanical data		Screw terminals	Cage clamp terminals	Insulation cutting terminals	
	Connection one wire - rigid - flexible - flexible, end covering sleeves (without / with plastic sleeving)	0.2 ... 2.5 mm ² 0.2 ... 2.5 mm ² 0.25 ... 2.5 mm ²	0.2 ... 2.5 mm ² 0.2 ... 2.5 mm ² 0.25 ... 2.5 mm ²	-- 0.5 ... 1 mm ² --	
	Connection two wires - rigid - flexible - flexible, end covering sleeves	0.2 ... 1 mm ² 0.2 ... 1.5 mm ² 0.25 ... 1 mm ²	-- -- 0.5 ... 1 mm ²	-- -- --	
	Weight Mounting type	approx. 170 g on DIN rail, EN 50022 (NS35/15; NS35/7.5)			
	Mounting position Casing protection class Terminal protection class Casing material Fire protecting class (UL-94)	horizontal or vertical IP 30 IP 20 PA6.6 V0			

Technical Data

Connection diagram

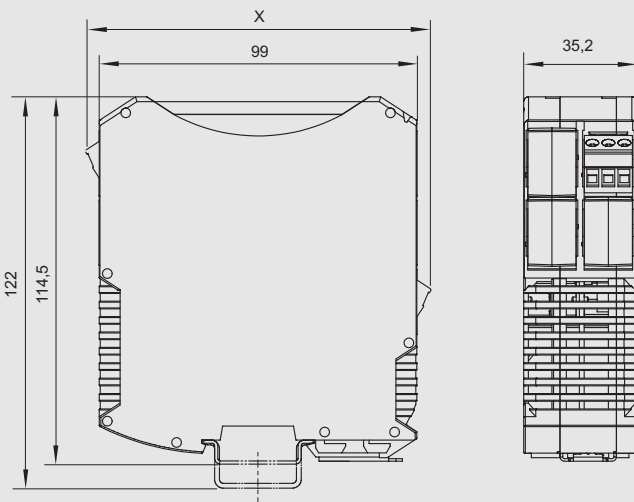


10597E02



10598E02

Dimension drawing (all dimensions in mm) - subject to alterations



10599E00

	Dimension X
Screw terminals	108 mm
Cage clamp terminals	128 mm
Insulation cutting terminals	131 mm



We reserve the right to make alterations to the technical data, weights, dimensions, designs and products available without notice. The illustrations cannot be considered binding.