



LED indication power supply

Potentiometer for adjustment of output voltage

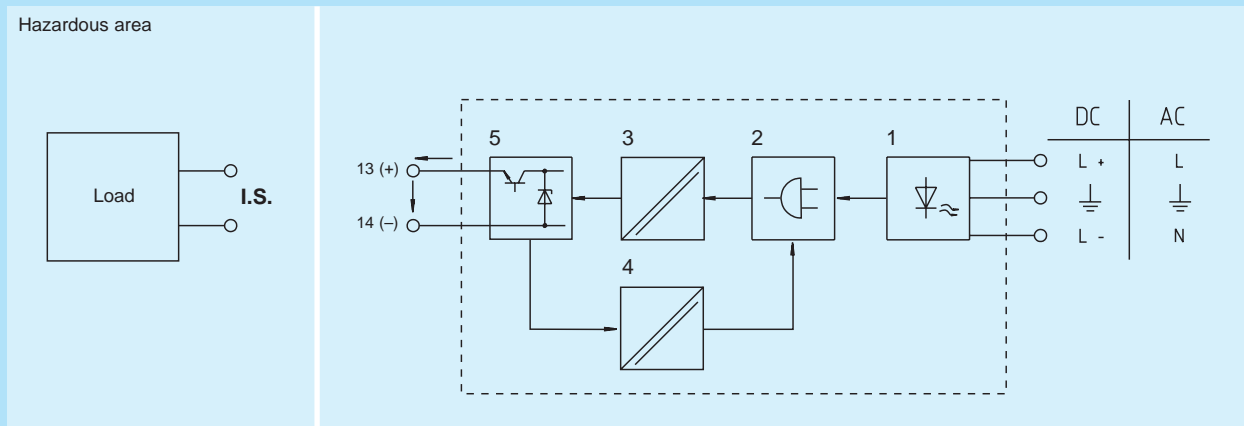
I.S. Isolators (DIN Rail Mounting) Intrinsically Safe Power Supply Type 9381

- Intrinsically safe output [EEx ib] IIC
- Constant output voltage adjustable
- Galvanic isolation between output and power supply
- Power supply 24 V AC/DC or 100 .. 250 V AC
- Installation in Zone 2 (Div 2) possible
- EMC tested, CE marking

Basic function: I.S. power supply, 1 channel

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.

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Selection table		
Version	Power supply	Ordering code
I.S. power supply	24 V / AC DC	9381 / 10 - ...¹⁾ - ...²⁾ - 10
I.S. power supply	115 / 230 V AC	9381 / 10 - ...¹⁾ - ...²⁾ - 50

1) Voltage, 2) Current, see table "Safety data for output".

Safety data for output	
Certifications	BVS (Europe, CENELEC), CSA (Canada), SEV (Switzerland), FTZU (Czech Republic), EVPU (Slovakia), BKI (Hungary), KDB (Poland), VNIIEF (Russia), FM (USA)
Marking	[EEx ia] IIC/IIB according to CENELEC
Classification	associated electrical apparatus

Safe maximum values (CENELEC)															
Types	1) Voltage	065-150	065-200	120-200	124-115	124-150	124-195	158-065	158-150	158-160	187-050	187-100	246-035	246-055	246-070
9381/10-...	2) Current														
Max. voltage	U _m [V]	6.5	6.5	12	12.4	12.4	12.4	15.8	15.8	15.8	18.7	18.7	24.6	24.6	24.6
Max. current	I _m [mA]	150	200	200	115	150	195	65	150	160	50	100	35	55	70
Max. power	P _m [mW]	975	1300	2400	1426	1860	2418	1027	2370	2528	935	1870	861	1353	1722
Max. capacitance for															
[EEx ib] IIC	C _a [nF]	250	350	300	200	380	–	150	–	–	100	–	34	–	–
[EEx ib] IIB	C _a [nF]	3500	2800	800	1100	900	680	300	470	470	500	390	200	180	130
Max. inductance for															
[EEx ib] IIC	L _a [mH]	1	0.5	0.15	0.5	0.15	–	0.5	–	–	0.5	–	0.5	–	–
[EEx ib] IIB	L _a [mH]	1	1	0.5	1	1	1	5	1	1	1	1	1	5	0.5
Output characteristic									square						
Further information and combinations of values, see certifications															



Technical data
Power supply
AC: Types 9381/...-50
Rated voltage U_N

115 / 230 V

Voltage range

100 .. 250 V

Frequency range

48 .. 62 Hz

Types 9381/10-...-50	065-150	065-200	120-200	124-115	124-150	124-195	158-065	158-150	158-160	187-050	187-100	246-035	246-055	246-070
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for rated voltage U_N : 230 V AC

Rated current (at I_n)	[mA]	11	14	21	14	18	21	11	20	21	11	16	10	13	15
Power losses (at I_n)	[W]	1.8	2.0	2.6	2.0	2.4	2.6	1.7	2.6	2.4	1.7	2.2	1.7	1.9	2.1

for rated voltage U_N : 115 V AC

Rated current (at I_n)	[mA]	22	28	42	28	36	42	22	40	42	22	32	20	26	30
Power losses (at I_n)	[W]	1.8	2.0	2.6	2.0	2.4	2.6	1.7	2.6	2.4	1.7	2.2	1.7	1.9	2.1

AC/DC Types 9381/...-10
Rated voltage U_N **AC**

24 V

Voltage range

20 .. 28 V

Frequency range

48 .. 62 Hz

Polarity reversal protection

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DC

24 V

18 .. 35 V

-

yes

Types 9381/10-...-10	065-150	065-200	120-200	124-115	124-150	124-195	158-065	158-150	158-160	187-050	187-100	246-035	246-055	246-070
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Rated current (at I_n)	[mA]	73	92	163	97	134	163	67	161	166	65	118	60	82	107
Power losses (at I_n)	[W]	1.0	1.2	1.9	1.3	1.7	1.9	1.0	1.9	1.9	1.0	1.5	1.0	1.0	1.4

Output

Types 9381/10-...	065-150	065-200	120-200	124-115	124-150	124-195	158-065	158-150	158-160	187-050	187-100	246-035	246-055	246-070
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Rated voltage U_N	[V]	6	6	10,8	12	12	12	15	15	15	18	18	24	24	24
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Adjustment range for voltage	[V]	4.8 .. 6		9.8..10.8		11 .. 12		13 .. 15			15 .. 18		18 .. 24	
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Rated current I_n	[mA]	130	170	190	90	130	170	45	130	140	35	75	22	38	50
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Dimensions (Casing type E), mechanical data, ambient conditions and accessories see page 3/58f.



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Intrinsically Safe Power Supply
Type 9381**

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