

# INSTALLATION CONTACTORS FOR RAILWAY APPLICATIONS



INSTALLATION CONTACTORS ARE THE MOST FLEXIBLE SWITCHING DEVICES FOR USE IN ALL TYPES OF APPLICATIONS. IN ELECTRONIC SYSTEM PROVIDE RELIABLE, SAFE AND EFFICIENT MANAGEMENT OF ELECTRICAL EQUIPMENT.

## ADVANTAGES

- Operation temperature from  $-40\text{ }^{\circ}\text{C}$  up to  $+70\text{ }^{\circ}\text{C}$
- DC coil operation from  $0.7\text{ }U_c$  up to  $1.25\text{ }U_c$
- 1 and 2 module width
- Shock and vibration resistance

## FOR RELIABLE SWITCHING

- Signalization
- Doors
- Heating
- Lights and lighting
- Ventilation and air conditioning

## OTHER BENEFITS

- Fast switching
- Wide application
- Mounting on 35 mm rail
- Sealing terminal covers

## STANDARDS

- IEC/EN 60947-4-1
- IEC/EN 60095
- IEC/EN 60077-1, IEC/EN 60077-2
- EN 50155
- IEC/EN 60373
- EN 45545-2

# INSTALLATION CONTACTORS FOR RAILWAY APPLICATIONS

UP TO 25 A

		Symbol	Unit	IKD20-V	IKD25-V
<b>GENERAL</b>	Type				
	Standards			IEC/EN 60947-1, IEC/EN 61095, IEC/EN 60077-1/-2, IEC/EN 61373, EN 45545-2	
	Approvals			CE	
	Module width			1	2
	Ambient temperature (open)		°C	-40 ... +70	
	Storage temperature		°C	-40 ... +80	
	Number of contactors or switches side-by-side:				
	<40 °C			no limitation	
	(40 ... 55) °C				max. 2
	Maximum operating frequency:				max. 1
	AC-1/AC-7a/AC-3/AC-7b			600	
	DC-1, DC-5, DC-13			300	
	No load			3000	
	Vibration resistance according to SIST EN 61373 category 1, class B	a	g	X, Y, z axis	
Shock resistance according to ISIST EN 61373 category 1, class B	a	g	X, Y, z axis		
Mechanical endurance		op. c.	10.000.000		
Weight		g	130	250	
<b>MAIN CIRCUIT</b>	Contact reliability			≥17 V; ≥50 mA	
	Minimum distance of open contacts		mm	3,6	
	Power dissipation per pole		W	1.7	2.2
	Overload current withstand capability:				
	10 s		A	72	68
	Maximum back-up fuse for short-circuit protection gL and gG: coordination type 1	I <sub>v</sub>	A	20	25
	Rated insulation voltage	U <sub>i</sub>	V	440	
	Rated impulse withstand voltage	U <sub>imp</sub>	kV	4	
	Rated operational voltage	U <sub>e</sub>	V	230	400
	Rated frequency	f	Hz	50/60	
	Thermal current	I <sub>th</sub>	A	20	25
	Rated operational current for AC-1, AC-7a and AC-21	I <sub>e</sub>	A	20	25
	Operational power for AC-1, AC-7a: single-phase 230 V	P <sub>e</sub>	kW	7	5.4
	Electrical endurance for AC-1, AC-7a		op. c.	150.000	200.000
	Rated operational current for AC-3/ AC-7b	I <sub>e</sub>	A	NO: 9; NC: 6	8.5
	Operational power for AC-3, AC-7b: single-phase 230 V	P <sub>e</sub>	kW	NO: 1.3; NC: 0.75	1.3
	Electrical endurance for AC-2		op. c.	200.000	500.000
	Rated operational current for DC-1 (L/R < 1 ms): 24 V DC / 36 V DC / 110 V DC	I <sub>e</sub>	A	20/20/8	25/20/6
	Electrical endurance for DC-1		op. c.	200.000	100.000
	Rated operational current for DC-5 (L/R < 7.5 ms): 24 V DC / 36 V DC / 110 V	I <sub>e</sub>	A	20/15/4	15/5/0.5
	Electrical endurance for DC-5		op. c.	300.000	100.000
	Rated operational current for DC-13: 24 V DC / 36 V DC / 110 V	I <sub>e</sub>	A	20/10/2	6/4/0.3
	Electrical endurance for DC-13		op. c.	200.000	
	Terminal capacity:				
	rigid	S	mm <sup>2</sup>	1 ... 10	
	flexible			1 ... 6	
Screw head			PZ1		
Tightening torque		Nm	1.2		
<b>COIL</b>	Range of control voltage	U <sub>c</sub>	%	70 ... 125	
	Kind of voltage			DC	
	Standard control voltage	U <sub>c</sub>	V	24, 36, 48, 110	
	Surge immunity test (1.2/50 µs) acc. to standard IEC/EN 61000-4-5		kV	2	
	Coil consumption				
	switch-on		VA/W	2.6 / 2.6	4.3 / 4.3 *
	operation			2.6 / 2.6	4.3 / 4.3
	Delays:				
	make		ms	15 - 45	15 - 45
	brake			20 - 50	20 - 70
	Terminal capacity:				
rigid (solid and stranded)	S	mm <sup>2</sup>	1 ... 2.5		
flexible			1 ... 2.5		
Screw head			PZ1		
Tightening torque		Nm	0.6		

\*) For version -04 is 4.6 VA / 4.6 W

# INSTALLATION CONTACTORS FOR RAILWAY APPLICATIONS

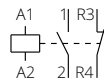
UP TO 25 A

## Wiring diagram

### IKD20-20-V



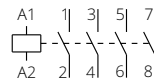
### IKD20-11-V



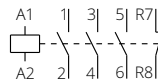
### IKD20-02-V



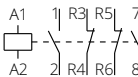
### IKD25-40-V



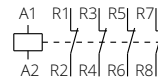
### IKD25-31-V



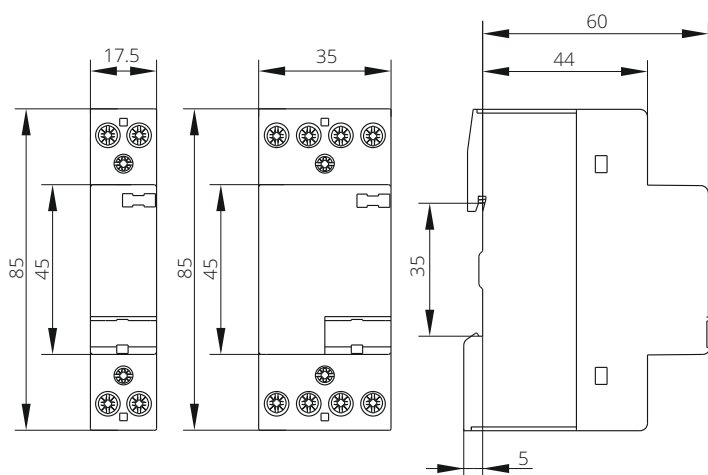
### IKD25-22-V



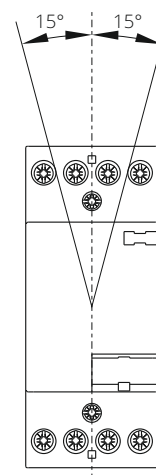
### IKD25-04-V



## Dimensions (in millimeters)

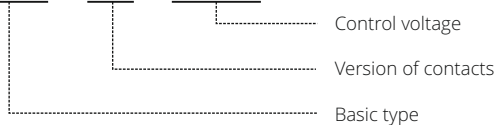


## Operation position



## ORDERING DATA

### IKD20 - 20-V / 24 V DC



Iskra, d.o.o.  
Stegne 21  
SI-1000 Ljubljana, Slovenia

Phone: +386 (0)1 51 31 000  
www.iskra.eu