					 5		
			-		Derating diagram a	c. to IEC512 (Current	carrying capacity)
	HARTING IX I	ndustrial® typ	еB		Current-carrying capacit	у	
General information						leasurement points — Heatin Jerating curve — Derati	g ng curve 80%
					5,0		
Design	Cable to Board for non e	thernet communication e.g. signals	& serial bus systems	-	4,0		
Product standard	IEC 61076-3-124 (Type B)				-		
No. of contacts	10	P 1 1			Operation Current / A		
Shielding Degree of protection	Fully shielded, 360° shield IP20	ding contact					
Mating cycles	Min. 5.000			1	+ š ;~~		0
UL/CSA		CSA-C22.2 No 182.3 ECBT8.E102079			2,0		
RoHS-compliant	Yes				ĪĒ	B	
Lead free	Yes				1,0	8	
					+		
Cable specification					0,0 + + + 0,0	18.0 36.0	54,0 72,0
Cable diameter	5,5 to 7,2 mm						nperature / °C
P/N	09451819000	09451819001	09451819002		+		- and the
Connection type	solder	IDC	IDC	-	Mechanical specifica	ation	
Conductor cross section	AWG 28 - 22	AWG 28/7 - 26/7	AWG 24/7				
Conductor diameter	max. 1,55 mm	0,95 - 1,05 mm	1,1 - 1,25 mm		Insertion force		
		· · · · · · · · · · · · · · · · · · ·			Withdrawal force		
Electrical specification					Mechanical Operation		
Rated current	1,5A - (all pins) values a	± /.በ°Ր			+		
	3A - 4 pins of contacts				Lock Strength		
Rated voltage	50 V AC / 60 V DC				Wrenching Strength		
Contact resistance	Contact: 30 mΩ max.				T		
(100 mA max. (DC or 1000 Hz))	Shield: 100 m Ω max.						<u>.</u>
- Insulation resistance Voltage proof	500 MΩ min. (500 V DC) 500 V DC (for 1 min. curr	ent leakane may 2 mÅ)			Environment specifi	cation	
		enn teakaye max. 2 mAj				חחפ	
Pin and pair grouping assignment					Operating temperature r		
		· · · · · · · · · · · · · · · · · · ·			Rapid change of temper		
pin assignment	front view of connector	Туре В			(IEC 60512-11d)		
					Dry heat (IEC 60512-11i)		
					(120 00012-11)		
					Damp heat cyclic		
	isek	alua			Damp heat cyclic (IEC 60068-2-38)		
	jack	plug			(IEC 60068-2-38) Cold		
	jack $\frac{10}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	plug			(IEC 60068-2-38) Cold (IEC 60512-11j)		
	jack 10 9 8 7 7 1 2 3 7 7 1 2 3 7 1 1 2 3 7 7 7 7 7 7 7 7 7 7 7 7 7	plug			(IEC 60068-2-38) Cold (IEC 60512-11j) Flow mixed gas test		
	jack 10 9 8 7 4 5 1 2 3 4 5 5 5 5	plug 10 9 8 7			(IEC 60068-2-38) Cold (IEC 60512-11j) Flow mixed gas test (IEC 60068-2-60)		
	jack 10 9 8 7 6 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 5 1 2 3 4 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1	plug			(IEC 60068-2-38) Cold (IEC 60512-11j) Flow mixed gas test (IEC 60068-2-60) Corrosion salt mist		:
	jack 10 9 8 7 6 1 2 3 4 5 1 2 3 4 5 5 1 1 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	plug 10 9 8 7 6			(IEC 60068-2-38) Cold (IEC 60512-11j) Flow mixed gas test (IEC 60068-2-60)		
	jack 10 9 8 7 6 1 2 3 4 5 1 2 3 4 5 5 1 2 3 4 5 5 1 2 3 4 5 5 1 2 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5	plug 10 9 8 7 6			(IEC 60068-2-38) Cold (IEC 60512-11j) Flow mixed gas test (IEC 60068-2-60) Corrosion salt mist Vibration Sinusoidal (IEC 60512-test 6d) Mechanical shock		
	jack 10 9 8 7 6 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	plug 10 9 8 7 6			(IEC 60068-2-38) Cold (IEC 60512-11j) Flow mixed gas test (IEC 60068-2-60) Corrosion salt mist Vibration Sinusoidal (IEC 60512-test 6d) Mechanical shock (IEC 60512-test 6c)		
	jack 10 9 8 7 6 1 2 3 4 5 1 2 3 4 5	plug 10 9 8 7 6			(IEC 60068-2-38) Cold (IEC 60512-11j) Flow mixed gas test (IEC 60068-2-60) Corrosion salt mist Vibration Sinusoidal (IEC 60512-test 6d) Mechanical shock (IEC 60512-test 6c) Mechanical shock (DIN EI		
	jack 10 9 8 7 6 1 2 3 4 5 1 2 3 4 5	plug 10 9 8 7 6			(IEC 60068-2-38) Cold (IEC 60512-11j) Flow mixed gas test (IEC 60068-2-60) Corrosion salt mist Vibration Sinusoidal (IEC 60512-test 6d) Mechanical shock (IEC 60512-test 6c) Mechanical shock (DIN El Additional test to fulfil	DIN EN 50155 for railway	equipment
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	jack 10 9 8 7 6 1 2 3 4 5 1 2 3 4 5	plug 10 9 8 7 6			(IEC 60068-2-38) Cold (IEC 60512-11j) Flow mixed gas test (IEC 60068-2-60) Corrosion salt mist Vibration Sinusoidal (IEC 60512-test 6d) Mechanical shock (IEC 60512-test 6c) Mechanical shock (DIN EI Additional test to fulfil Random vibration (DIN EI Additional test to fulfil	DIN EN 50155 for railway 61373 Class 1 cat b)	equipment
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	jack 10 9 8 7 6 12 3 4 5 1 2 3 4 5	plug 10 9 8 7 6			(IEC 60068-2-38) Cold (IEC 60512-11j) Flow mixed gas test (IEC 60068-2-60) Corrosion salt mist Vibration Sinusoidal (IEC 60512-test 6d) Mechanical shock (IEC 60512-test 6c) Mechanical shock (DIN EI Additional test to fulfil Random vibration (DIN E Additional test to fulfil Fretting Corrosion	DIN EN 50155 for railway 61373 Class 1 cat b)	equipment
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	jack 10 9 8 7 6	plug 10 9 8 7 6 10 9 8 7 6			(IEC 60068-2-38) Cold (IEC 60512-11j) Flow mixed gas test (IEC 60068-2-60) Corrosion salt mist Vibration Sinusoidal (IEC 60512-test 6d) Mechanical shock (IEC 60512-test 6c) Mechanical shock (DIN El Additional test to fulfill Random vibration (DIN El Additional test to fulfill Fretting Corrosion	I DIN EN 50155 for railway 1 61373 Class 1 cat b) 1 DIN EN 50155 for railway mensions in mm Scal al Size DIN A3 1:1 rs reserved Create PREOTU	equipment equipment equipment e Free size tol.
	jack 12 9 8 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 7 6 7 7 6 7 7 7 6 7	plug 10 9 8 7 6 10 9 8 7 6			(IEC 60068-2-38) Cold (IEC 60512-11j) Flow mixed gas test (IEC 60068-2-60) Corrosion salt mist Vibration Sinusoidal (IEC 60512-test 6d) Mechanical shock (IEC 60512-test 6c) Mechanical shock (DIN El Additional test to fulfil Random vibration (DIN E Additional test to fulfil Fretting Corrosion	I DIN EN 50155 for railway N 61373 Class 1 cat b) I DIN EN 50155 for railway mensions in mm al Size DIN A3 T:1 Create PREOTU	equipment equipment e Free size tol. d by Inspected PRIESTER
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	jack 1 9 8 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 7 6 7	plug 10 9 8 7 6 7 6			(IEC 60068-2-38) Cold (IEC 60512-11j) Flow mixed gas test (IEC 60068-2-60) Corrosion salt mist Vibration Sinusoidal (IEC 60512-test 6d) Mechanical shock (IEC 60512-test 6c) Mechanical shock (DIN El Additional test to fulfill Random vibration (DIN El Additional test to fulfill Fretting Corrosion	I DIN EN 50155 for railway N 61373 Class 1 cat b) I DIN EN 50155 for railway mensions in mm al Size DIN A3 Title H	equipment equipment e Free size tol. d by Inspected PRIESTER IARTING ix Indust
	jack 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	plug 10 9 8 7 6 7 6			(IEC 60068-2-38) Cold (IEC 60512-11j) Flow mixed gas test (IEC 60068-2-60) Corrosion salt mist Vibration Sinusoidal (IEC 60512-test 6d) Mechanical shock (IEC 60512-test 6c) Mechanical shock (IEC 60512-test 6c) Mechanical shock (DIN El Additional test to fulfil Random vibration (DIN El Additional test to fulfil Fretting Corrosion All Dorigin All right Department g	I DIN EN 50155 for railway N 61373 Class 1 cat b) I DIN EN 50155 for railway mensions in mm al Size DIN A3 T:1 Create PREOTU IL PD Title	equipment equipment e Free size tol. d by Inspected PRIESTER IARTING ix Indust

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	<u>.</u>	<u>.</u>				
A @ 40°C			A			
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The current car	rying capacity is limite	ed by				
	ature of materials for inserts :luding terminals.					
	-					
	acity curve is valid for continuous, current loaded contacts of connectors					
	ius power on all conta ng the maximum tempe					
			B			
	t procedures according	G TO DIN IEL 60 512.				
90,0						
aA 24.06.2016						
«. 25 N						
x. 25 N						
00 times insertions and extraction	S		c			
ing speed: 10 mm/s max. t: 5s,min. (unmated)						
. 80 N (for the mating axis directi						
olying 25times of 30 N 1 s for 2 a e in state in fitted with applicable		plug				
°C to +60°C (95% RH max.) °C to +85°C (95% RH max.)						
cycles between -55°C and 85°C wit	th 30 minutes dwell at	temp.				
remes and 1 minute transition bet						
nperature 85°C, duration 500 h			D			
C to 65°C; cold sub-cycle - 10°C;	humidity 93 % RH					
cycles, 1 cycle/24 h	,					
°C duration 240 h						
ation 4 d, Method 4 (mated and u	nmated)					
osed at 5 % salt water, 35 ± 2°C						
– 500 Hz; 0,35 mm; 49 m/s [;] n / 3 axis; No contact distu						
f sine shock 500 m/s², duration 11	ms					
hocks / both directions / 3 axis -	totally 18 shocks; N	o contact disturbances ≥ 1 µs				
f sine shock 5 g, duration 30 ms hocks / both directions / 3 axis -	- totally 30 shorks. N	n rontart disturbances > 1 us	E			
ass 1 cat b		o contact distributices = 1 hs				
2 m/s²; No contact disturba						
0 m/s², 30 times/min_at 1.00	10 times; No conta	ict disturbances ≥ 1 µs				
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y Standardisation		State	┥╽			
y Standardisation 302077	Date 2020-10-22	Final Release				
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						Packaging specificat	ION		
	HARTING KLIE	HARTIN(1 ix 1	ndustrial® type B						
A						Material			PE + PS
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	M. L. 1 L. 201 L.	· · · · · · · · · · · · · · · · · · ·							
	Material specification								
	Isolator material plug								
_									
	Material	Isolation body PA							
		Plug hood PC							
	Color	Black							
	UL classification	UL94 V-0							
			8	x					
	Isolator material jack								
E	B P/N	09452819000	09452819001 094528	19002					
	Material	LCP	LCP PA						
	Color	Grey							
	UL classification	UL94 V-0							
	Contact		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					
		, ,		-					
	Contact material	Copper alloy							
	Plating contact zone	Au (min. 0,2 µm) over Ni (r				1			
	Plating solder area	Au (min. 0,05 µm) over Ni	min. 1,27 µm)						
			8	x					
	Shielding shells								
	Material	Stainless steel							
	-	Sn (min. 1 µm) over Ni (mir	2 µm) solder area and mating zone						
Ľ	Plating	Ni (min. 2 µm) for all othe	areas						
				· · · · · ·					
		÷	· · ·	÷					
	Soldering specification								
		·							
		Soldering point immersed i	n solder bath of +235°C ± 5°C, 5 sec. (using type r f						
	Solderability	Solder rover minimum of 9	5 % of the surface being immersed.						
	<u></u>		3 % of the surface being miniersed.						
	Resistance to soldering heat	;							
	Soldering details plug	+250°C ± 10°C, 5 sec. at s							
	Soldering details jack	PSL level acc. ECA/IPC/JE	IEC J-STD-075 PSL F	RO					
		MSL level acc. ECA/IPC/JE							
	Recommended soldering profile for plu	ug							
C) In addition to the maximum value	es resulting from the above mentioned MSL and F	SL values, we can recommend the following so	dering profile as a guide. Please note that this	is only an				
	indication. The specific soldering	profile must always be adapted to the applicati	on and the solder which will be used.						
⊢	-1	(°C)				1			
		250 2	40°C						
		200 2	30°C MIN						
		200							
		180°C							
	_								
E	-	150-1500	\						
		100 /							
			60 S _ 30 S _ 🔪						
		50 - /							
I			\longrightarrow					,	
	7		mmonded reflex profile tomostation				nensions in mm	Scale Free siz	ze tol.
I		Reco	mmended reflow profile temperature				al Size DIN A3	1:1	
			(temperature at smt leads)				JI JIZE UIN AJ		<u> </u>
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						Department E	L PD	Title	*
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	Standardisation 302077	2020-10-22	Final Release	
al® typ			Doc-Key / ECM-Nr. 100794076/UGD/000/E 500000181835	F
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