

<https://www.wago.com/721-835/001-040>



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Technical drawing of a mechanical assembly. The left side shows a cross-section of a component with dimensions: 30, 12, 11,4, 7,5, 3,8, 10, 12, 1,5. The right side shows two views of the component with dimensions: 4,1, 7,5, 4,1, 6,4, 7,5, 5, L₁, L₂, L₃.

$$L3 = L2 + 7.4 \text{ mm}$$

Derating Curve
1-conductor female connector (721-102/026-000) with
THT male header (721-862/001-000)
Pin spacing: 7.5 mm / Conductor cross-section: 2.5 mm² "f-st"
Based on: EN 60512-5-2 / Reduction factor: 0.8

Current in A

Ambient operating temperature in °C

2-, 4-, 6-, 12-pole

Conductor rated current

Ambient operating temperature (°C)	2-pole (A)	4-pole (A)	6-pole (A)	12-pole (A)	Conductor rated current (A)
0	38	35	32	30	25
10	36	33	30	28	25
20	34	31	28	26	25
30	32	29	26	24	25
40	30	27	24	22	25
50	28	25	22	20	25
60	25	22	20	18	25
70	20	18	16	14	25
80	15	13	11	10	25
90	10	8	7	6	25
100	5	4	3	2	25
105	0	0	0	0	25

Die Stiftleiste mit der Artikelnummer 721-835/001-040 verspricht eine fehlerfreie Elektroinstallation. Unsere Leiterplatten-Steckverbinder gewähren Ihnen die größtmögliche Flexibilität bei unterschiedlichen Montagearten. In Breite x Höhe x Tiefe sind die Abmessungen (38,2 x 15,2 x 12) mm. Die Oberfläche der Kontakte ist aus Zinn. Das MCS – "Multi Connection System" von WAGO ist ein vielfältiges Steckverbindersystem für Ihre durchgängige Systemverdrahtung. Es ermöglicht Ihnen eine vereinfachte Verdrahtung in der Kabelvorkonfektionierung und auf Geräten durch zwei Betätigungsrichtungen für die CAGE CLAMP®-Varianten. Der Leiterplatten-Steckverbinder wird mittels THT verlötet.

Safety Information

Variants:

The MCS – MULTI CONNECTION SYSTEM includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must not be connected/disconnected when live or under load. When used as intended, these connectors must not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

Other pole numbers

3.8 mm pin projection for male headers with straight solder pins

Gold-plated or partially gold-plated contact surfaces

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.



Electrical data						
Ratings per		IEC/EN 60664-1			Approvals per	
		UL 1059				
Overvoltage category	III	III	II	Use group	B	C
Pollution degree	3	2	2	Rated voltage	300 V	-
Nominal voltage	500 V	630 V	1000 V	Rated current	15 A	-
Rated surge voltage	6 kV	6 kV	6 kV			
Rated current	12 A	12 A	12 A			

Approvals per		UL 1977			Approvals per	
		CSA				
Rated voltage		600 V			Use group	B
Rated current		10 A			Rated voltage	300 V
					Rated current	15 A

Connection data			
Total number of potentials	5	Connection 1	
Number of connection types	1	Pole number	5
Number of levels	1		
PE function	Preceding PE contact		

Physical data		
Pin spacing		7.5 mm / 0.295 inches
Width		38.2 mm / 1.504 inches
Height		15.2 mm / 0.598 inches
Height from the surface		11.4 mm / 0.449 inches
Depth		12 mm / 0.472 inches
Solder pin length		3.8 mm
Solder pin dimensions		1 x 1 mm
Drilled hole diameter with tolerance		1.4 (+0.1) mm

Mechanical data		
Variable coding		Yes
Anti-rotation protection		Yes

Plug-in connection		
Contact type (pluggable connector)		Male connector/plug
Connector (connection type)		for PCB
Mismating protection		Yes
Mating direction to the PCB		0 °

PCB contact		
PCB contact		THT
Solder pin arrangement		over the entire male connector (in-line)
Number of solder pins per potential		1



Material data	
Note (material data)	Information on material specifications can be found here
Color	light gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E _{CU})
Contact Plating	Tin
Fire load	0.044 MJ
Weight	2.2 g

Environmental requirements	
Limit temperature range	-60 ... +100 °C
Processing temperature	-35 ... +60 °C
Environmental Testing (Environmental Conditions)	
Test specification Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure Railway applications – Rolling stock equipment – Shock and vibration tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Installation location	Service life test, Category 1, Class A/B
Function test with noise-like vibration	Test passed according to Section 8 of the standard
Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz f ₁ = 5 Hz to f ₂ = 150 Hz
Acceleration	0.101g (highest test level used for all axes) 0.572g (highest test level used for all axes) 5g (highest test level used for all axes)
Test duration per axis	10 min. 5 h
Test directions	X, Y and Z axes X, Y and Z axes X, Y and Z axes
Monitoring for contact faults/interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like vibration	Test passed according to Section 9 of the standard
Extended test scope: Monitoring for contact faults/interruptions	Passed Passed
Extended test scope: Voltage drop measurement before and after each axis	Passed Passed
Shock test	Test passed according to Section 10 of the standard
Shock form	Half sine
Shock duration	30 ms
Number of shocks per axis	3 pos. und 3 neg.
Vibration and shock stress for rolling stock equipment	Passed



Commercial data		
Product Group	3 (Multi Conn. System)	
PU (SPU)	100 pcs	
Packaging type	Box	
Country of origin	PL	
GTIN	4044918869980	
Customs tariff number	85366930000	

Product classification		
UNSPSC	39121409	
eCl@ss 10.0	27-44-04-02	
eCl@ss 9.0	27-44-04-02	
ETIM 9.0	EC002637	
ETIM 8.0	EC002637	
ECCN	NO US CLASSIFICATION	

Environmental Product Compliance		
RoHS Compliance Status	Compliant,No Exemption	

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
   					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-113351	Railway WAGO GmbH & Co. KG	-	Railway Ready
CSA CSA Group	C22.2	1466354			
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-121453			
UR Underwriters Laboratories Inc.	UL 1977	E 45171			
UR Underwriters Laboratories Inc.	UL 1059	E45172			

Approvals for marine applications

 		
Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	19-HG1869876-PDA
BV Bureau Veritas S.A.	IEC 60998	11915/D0 BV

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance

721-835/001-040



Documentation

Additional Information

Technical Section

03.04.2019

pdf

2027.26 KB



CAD/CAE-Data

CAD data

2D/3D Models

721-835/001-040



CAE data

EPLAN Data Portal

721-835/001-040



ZUKEN Portal

721-835/001-040



PCB Design

Symbol and Footprint via SamacSys

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Symbol and Footprint via Ultra Librarian

721-835/001-040



1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: 721-205/026-000
1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 5-pole; 100% protected against mismatching; 2,50 mm²; light gray

1.2 Optional Accessories

1.2.1 Coding

1.2.1.1 Coding



Item No.: 231-130
Coding key; snap-on type; light gray

1.2.2 Marking

1.2.2.1 Marking strip



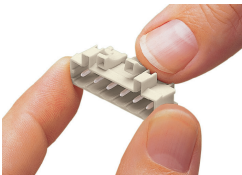
Item No.: 210-833
Marking strips; 25 m on roll; 6 mm wide; plain; Self-adhesive; white



Item No.: 210-834
Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white

Installation Notes

Coding



Coding a male header – fitting coding key (s).