

Zertifikat

Certificate



Zertifikat Nr. Certificate No.
R 50475788

Blatt Sheet
0002

Ihr Zeichen Client Reference
J.H.

Unser Zeichen Our Reference
01-MSY-60403007 003

Ausstellungsdatum Date of Issue
17.06.2022 (day/mo/yr)

Genehmigungsinhaber License Holder
TE Connectivity Corporation
2901 Fulling Mill Rd
Middletown PA 17057-3170
USA

Fertigungsstätte Manufacturing Plant
Tyco Electronics (Shenzhen)
Co., Ltd.
Tyco Electronics Technology
Park, Shiyan Street, Baoan District
Shenzhen
518108 Guangdong
P.R. China

Prüfzeichen Test Mark



Type Approved
Safety
Regular Production
Surveillance

www.tuv.com
ID 111122727

Geprüft nach Tested acc. to
EN 61984:2009

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Connector (AMP Universal Power Connectors)

as page 0001

Addition

Name of Factory : See above

Address of Factory : See above

Remark:

Appendix 1.0 dated on 16.06.2022 replaces
Appendix 1.0 dated on 13.10.2020.

ANLAGE (Appendix): 1.0

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzlich Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.



Zertifizierungsstelle

Paulus Hou

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg

http://www.tuv.com/safety E-mail: markcheck@tuv.com
Fax: +49 221 806-3935

Zertifikat

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USA

Fertigungsstätte Manufacturing Plant
Tyco Electronics (Qingdao) Ltd.
12 Xinghui Road, Jiaozhou Bay
Comprehensive Bonded Zone, Hetao
Chengyang Qingdao,
266113 Shandong
P.R. China

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as page 0001

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Paulus Hou

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg

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Certificate No. R50475788 0001-0003 Our Reference 01-MSY-60403007 003 Appendix No. 1.0

Constructional Data Form (CDF) for Connector

License holder : TE Connectivity Corporation
2901 Fulling Mill Road, Middletown PA, 17057-3170, USA

Factory : [Redacted]

Type of Appliance : Connector
 Type Designation : See Table A
 Rating : See Table B
 Protection Class : See Table B
 Supply connection : power cord
 fixed wiring
 direct plug in
 others: fixed installation

Please tick above box when applicable

Additional information :

Other technical information see Table B

Table A: Model numbers of AMP Universal Power Connector:

I. 7.92mm pitch CONNECTOR

No. of Pos.	Plug Housing	Header Assembly
2	353440	2-178496

CONTACT

Part No.	Details
353439-1	Receptacle Contact, 20-16AWG, Pre-tinned, Copper Alloy



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Constructional Data Form (CDF) for Connector

II. CONNECTOR Housing
3.96mm pitch CONNECTOR

No. of Pos.	Plug Housing	Cap Housing		Header Assembly	
		Free Hanging	Panel Mounting	Vertical	Horizontal
Single Row					
1	176270	176281	-	-	-
2	*176271	*176282	176292	*176975	178495
2	178125	-	-	178601	-
3	176272	176283	176293	*176976	*178496
4	178481	178478	178740	*178487	*178497
5	178482	178479	-	*178488	*178498
6	178483	178480	-	*178489	178499
Dual Row					
4	176273	176284	176294		
6	176274	176285	176295		
8	176275	176286	176296		
10	176277	176288	176298		
Triple Row					
9	176276	176287	176297		
12	176278	176289	176299		
15	176279	176290	176300		
18	176280	176291	176301		

6.2mm pitch CONNECTOR

No. of Pos.	Plug Housing	Header Assembly	
		Vertical	Horizontal
3-9	*178842	*178841	-

CONTACT

Part No.		Details
Strip	Loose Piece	
175149-1	175153-1	Tab contact, 26-22AWG, pre-tinned, copper alloy
175149-2	175153-2	Tab contact, 26-22AWG, pre-tinned, brass
175150-1	175154-1	Tab contact, 20-16AWG, pre-tinned, copper alloy
175150-2	175154-2	Tab contact, 20-16AWG, pre-tinned, brass

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Constructional Data Form (CDF) for Connector

175151-1	175155-1	Receptacle contact, 26-22AWG, pre-tinned, copper alloy
175151-2	175155-2	Receptacle contact, 26-22AWG, pre-tinned, brass
175152-1	175156-1	Receptacle contact, 20-16AWG, pre-tinned, copper alloy
175152-2	175156-2	Receptacle contact, 20-16AWG, pre-tinned, brass

Remark:

- For those model with "*" prefixes, differences are listed in following table:

Base model number	With Prefixes	Details
176271	1-176271	use resin FRIANYL A3 RV0, compared with 176271-X
176282	1-176282	use resin FRIANYL A3 RV0, compared with 176282-X
176975	1-176975	2P HEADER WITH CONTACT 0.64*1.10
	9-176975	2P HEADER WITH CONTACT 0.64*0.64
176976	3-176976	2P HEADER, 7.92MM PITCH WITH CONTACT 0.64*0.64
	5-176976	3P HEADER, 3.96MM PITCH WITH CONTACT 0.64*1.10
	6-176976	2P HEADER, 7.92MM PITCH WITH CONTACT 0.64*1.10
178487	1-178487	4P HEADER, 3.96MM PITCH WITH CONTACT 0.64*1.10
178488	1-178488	5P HEADER, 3.96MM PITCH WITH CONTACT 0.64*1.10
	2-178488	3P HEADER, 7.92MM PITCH WITH CONTACT 0.64*0.64
	3-178488	3P HEADER, 7.92MM PITCH WITH CONTACT 0.64*1.10
	4-178488	4P HEADER, 3.96&7.92MM PITCH WITH CONTACT 0.64*0.64
178489	1-178489	6P HEADER, 3.96MM PITCH WITH CONTACT 0.64*1.10
178496	2-178496	2P HEADER, 7.92MM PITCH
178497	5-178497	2P HEADER, 7.92MM PITCH FOR ALL COLOR EXCEPT RED
	6-178497-2	2P HEADER, 7.92MM PITCH FOR RED COLOR
178498	3-178498	3P HEADER, 7.92MM PITCH
178841	1-178841	3P HEADER 6.2MM PITCH WITHOUT BOSS POST
	2-178841	4P HEADER 6.2MM PITCH WITH BOSS POST
	3-178841	4P HEADER 6.2MM PITCH WITHOUT BOSS POST
	4-178841	6P HEADER 6.2MM PITCH WITH BOSS POST
	5-178841	6P HEADER 6.2MM PITCH WITHOUT BOSS POST
	6-178841	9P HEADER 6.2MM PITCH WITH BOSS POST
	7-178841	9P HEADER 6.2MM PITCH WITHOUT BOSS POST
178842	3-178842	3P 6.2MM PITCH PLUG
	4-178842	4P 6.2MM PITCH PLUG
	6-178842	6P 6.2MM PITCH PLUG
	9-178842	9P 6.2MM PITCH PLUG

- For all connectors mentioned above, there are 6 kinds of suffixes corresponding to 6 colours as below:
-1: Natural, -2: Red, -4: Yellow, -5: Green, -6: Blue, -9: Black



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Constructional Data Form (CDF) for Connector

Table B:

Rated current	Refer to Table B Derating curve
Rated voltage	380Vac/450Vdc
Earthing contact	Without
Number of poles	1-18 poles
Class of protection	Enclosed connectors
Breaking capacity	Without
Operating cycles	25
Rated insulation voltage	2,5KV
Pollution degree	2
Overvoltage category	II
Rated impulse voltage	2,5KV
Ambient temperature	-20°C to +70°C
Lower / Upper temperature limit	-20 °C to +105 °C
Material Group	I, IIIa
Type of termination and connection	Crimp & Soldering
Classification of installation and use	Fixed installation
Existence of interlock	N/A
Degree of protection	IP20

TÜV Rheinland Group

TE Connectivity Corporation

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Constructional Data Form (CDF) for Connector

Table C Derating parameters

No. of Connector Position	Contact Wire size	Receptacle contact 175152 Tab contact 175150 (A)			Receptacle contact 175151 Tab contact 175149 (A)		
		16AWG	18AWG	20AWG	22AWG	24AWG	26AWG
1, 2		12	9	7	6	5	3
3		11	8	6	5	4	2
4		10	7	6	5	4	2
6		9	7	6	4	3	2
8		9	6	5	4	3	2
9, 10		8	6	5	4	2	2
12		8	5	4	3	2	2
15		7	5	4	3	2	1
18		7	4	3	3	2	1

No. of Connector Position	Contact Wire size	Receptacle contact 353439 (A)		
		16AWG	18AWG	20AWG
2		10	10	5

TÜV Rheinland Group

TE Connectivity Corporation

16.06.2022 Ann Ma



Date

Printed Name

Signature

Date

Printed Name

Stamp&Signature of license holder

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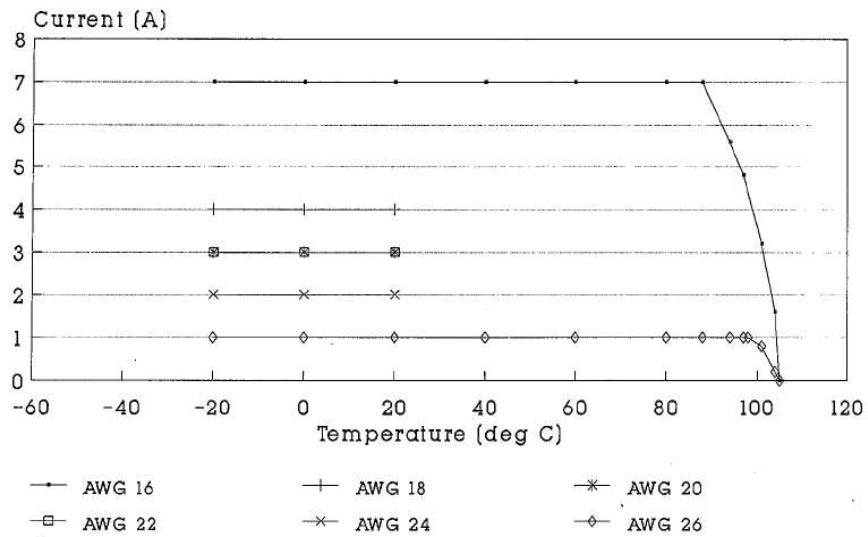
Our Reference 01-MSY-60403007 003

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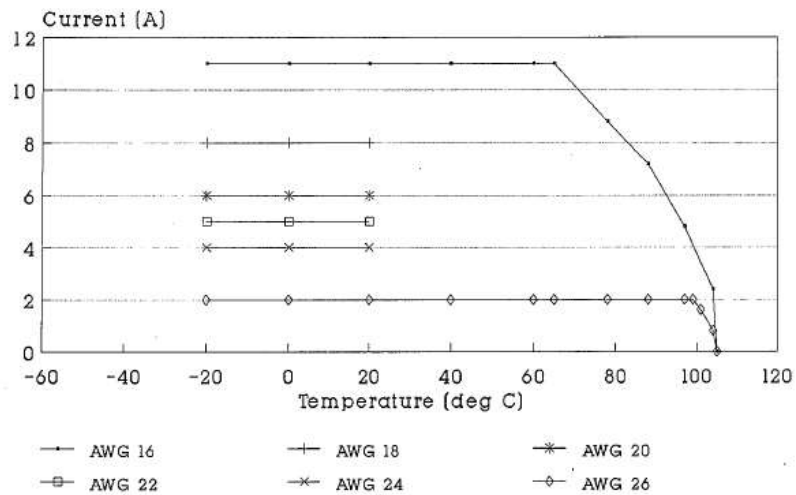
Constructional Data Form (CDF) for Connector

Derating curve

Derating Curve for Connector
AMP Universal Power (18 poles)



Derating Curve for Connector
AMP Universal Power (3 poles)



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Constructional Data Form (CDF) for Connector

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Critical Components

Material: e.g. external enclosure, PCB, closed-end connector, sleeves, cord anchorage etc

Components with winding: e.g. motor, transformer, magnetic coil etc.

Other components: e.g. switch, thermostat, heater, plug, internal wire, capacitor, relay, varistor etc.

Object/part No.	Manufacturer/ trademark	Type/ model	Technical data	Standard	Mark(s) of conformity
Housing Material			PA66, all color, V-0, CTI: 600V, Ball-pressure (125°C): 1,1mm	EN 61984	Tested with appliance
(alternative)			PBT, all color, V-0, CTI: 250-399V, Ball-pressure (125°C): 1,0mm	EN 61984	Tested with appliance
(alternative)			PA66, all color V-0, CTI: 600	EN 61984	Tested with appliance
(alternative)			PA66, all color, V-0, CTI: 250-399V, Ball-pressure (125°C): 0,9mm	EN 61984	Tested with appliance
(alternative)			PA66, all color, V-0, CTI: 600V, Ball-pressure (125°C): 1,1mm,	EN 61984	Tested with appliance
(alternative)			PA66, all color, V-0, CTI: 600V, Ball-pressure (190°C): 3,0mm	EN 61984	Tested with appliance
			Color Concentrates, all color	EN 61984	Tested with appliance
Contacts		-	COPPER ALLOY, PRE-TINNED	EN 61984	Tested with appliance
(alternative)		-	COPPER ALLOY, PRE-TINNED	EN 61984	Tested with appliance



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Constructional Data Form (CDF) for Connector

Critical Components

Material: e.g. external enclosure, PCB, closed-end connector, sleeves, cord anchorage etc

Components with winding: e.g. motor, transformer, magnetic coil etc.

Other components: e.g. switch, thermostat, heater, plug, internal wire, capacitor, relay, varistor etc.

Object/part No.	Manufacturer/ trademark	Type/ model	Technical data	Standard	Mark(s) of conformity
(alternative)		-	BRASS, PRE-TINNED	EN 61984	Tested with appliance

Functional Components

Components which are required for performance purposes and not directly addressed by a component standard or product standard: Ripple capacitors, Mosfets, etc.

Object/part No.	Type/ model (optional)	Technical data
N/A	N/A	N/A

Others:

This CDF replaces CDF issued on 13.10.2020.

