

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50418426

Blatt *Sheet*
0001

Ihr Zeichen *Client Reference*
APP-160621

Unser Zeichen *Our Reference*
ZJL-MAS-50047432 001

Ausstellungsdatum *Date of Issue*
25.10.2018
(day/month/year)

Genehmigungsinhaber *License Holder*

Tyco Electronics Japan G.K.
3-5-8 Hisamoto, Takatsu-ku
Kawasaki-shi, Kanagawa
213-8535 Japan

Fertigungsstätte *Manufacturing Plant*

Tyco Electronics Japan G.K.
Kakegawa Distribution Center (JPDC)
102 Shobugaike,
Kakegawa-shi, Shizuoka
436-0040 Japan

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*

EN 61984:2009
IEC 61984:2008

**Zertifiziertes Produkt (Geräteidentifikation)
*Certified Product (Product Identification)***

**Lizenzentgelte - Einheit
*License Fee - Unit***

Connector Connector without breaking capacity

Type Designation:	Moulded Case Multiple Connectors	
	Jack case assy type 1981913-1+1981914-1	5
	Jack case assy type 1981913-1+2013391-1	1
	Plug case assy type 1981919-1+1981921-1	1
	Plug case assy type 1981919-1+2013393-1	1
	equipped with dominated contacts.	
Number of poles:	Max. 32	
Electrical Ratings:	0.5A - 1.5A (AC 125V, OVC III/2.5kVpeak or AC 160V, OVC II/2.5kVpeak)	
Applicable conductor size:	AWG 30 - AWG 22	
Limit Temperature:	-30°C to +105°C	
Max. Ambient Temperature with rated current:	+75°C	
Pollution Degree:	2	
Classification:	COC	
IP-Code:	IPXXB (mated) or IP20(simulation of final use)	
Remark:	The connector plug could be provided with cable gland with/without fitting insulation bushing according to the real cable size used.	

ANLAGE (Appendix): 1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche 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.

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg

Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com
Fax: +49 221 806-3935 http://www.tuv.com/safety



8

Zertifizierungsstelle

Vilmos Sztaroveczki

Constructional Data Form for Connector

Page 1/5

License holder: **Tyco Electronics Japan G.K.**
 3-5-8 Hisamoto, Takatsu-ku, Kawasaki-shi, Kanagawa 213-8535 Japan

Factory: **Tyco Electronics Japan G.K Kakegawa DC**
 (Full address) 102 Shobugaike, Kakegawa-shi, Shizuoka

Type or Model Number: Moulded case 32-pole connectors could be provided with maximum 32 identical contacts for internal wiring or inter-connection inside of an equipment/enclosure.
 - Combination 1 (in pair): [Jack case(1981913-1)+tab housing(1981914-1) + tab contacts] + [plug case(1981919-1)+rece housing(1981921-1) + rece contacts]
 - Combination 2 (in pair): [Jack case(1981913-1)+rece housing(2013391-1) + rece contacts] + [plug case(1981919-1)+tab housing(2013393-1) + tab contacts]

Kind of device: Moulded case 32-pole connectors

Specifications	
Type designation	See Nomenclature
Contact material	Copper alloy Ni plated Au plated
Number of poles	Max. 32 poles
Rated voltage	AC150V, AC160V
Rated current	See table 1
Mechanical endurance	50 times
Classification	<input type="checkbox"/> CBC <input checked="" type="checkbox"/> COC (Non CBC) <input type="checkbox"/> other
Upper limit temperature	+105°C
Lower limit temperature	-30°C
Maximum ambient temperature at rated current	75°C
IP Code	- IP XXB _ finger protection of mated connectors - IP20, simulation of the final use and mated case, the free connectors are also provided with dominated cable glands with/without insulation sleeving to hold the suitable cable size tightly. Note: The free connector could be provided with dominated cable gland with/without fitting of insulation sleeving according to the actual cable size., it is expecting to be tested according to the real cable size and product standard on-site.

TÜV Rheinland

 18 October
 2018

(Date)



(Signature)

Kawasaki

(Place)

18 October 2018

(Date)

Tyco Electronics Japan G.K.

(Stamp and Signature of Applicant)



Constructional Data Form for Connector
Classification of Connectors COC CBC

Type of connector	Style	Enclosure		Cable Clamp (See note)		Function
Jack case assy type 1981913-1 +1981914-1 or 2013391-1	<input type="checkbox"/> Free Connector <input checked="" type="checkbox"/> Fixed Connector	<input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Un-enclosed	<input checked="" type="checkbox"/> Hand Back Safety mated <input checked="" type="checkbox"/> Hand Back Safety unmated <input checked="" type="checkbox"/> Finger Safety mated <input type="checkbox"/> Finger Safety unmated <input type="checkbox"/> IP67 mated <input checked="" type="checkbox"/> IP20 mated	<input type="checkbox"/> with additional insulation bushing <input type="checkbox"/> without	Applicable Cable Size Range: --	<input type="checkbox"/> with PE <input checked="" type="checkbox"/> without PE
		*1) Protection class mated: <input type="checkbox"/> Class I <input checked="" type="checkbox"/> Class II <input type="checkbox"/> N/A	<input type="checkbox"/> with additional insulation bushing <input type="checkbox"/> without	<input type="checkbox"/> with interlock <input checked="" type="checkbox"/> without interlock		
Plug case assy type 1981919-1 +1981921-1 or 2013393-1	<input checked="" type="checkbox"/> Free Connector <input type="checkbox"/> Fixed Connector	<input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Un-enclosed	<input checked="" type="checkbox"/> Hand Back Safety mated <input checked="" type="checkbox"/> Hand Back Safety unmated <input checked="" type="checkbox"/> Finger Safety mated <input type="checkbox"/> Finger Safety unmated <input type="checkbox"/> IP67 mated <input checked="" type="checkbox"/> IP20 mated	<input type="checkbox"/> with additional insulation bushing <input type="checkbox"/> without	Applicable Cable Size Range: --	<input type="checkbox"/> with PE <input checked="" type="checkbox"/> without PE
		*1) Protection class mated: <input type="checkbox"/> Class I <input checked="" type="checkbox"/> Class II <input type="checkbox"/> N/A	<input type="checkbox"/> with additional insulation bushing <input type="checkbox"/> without	<input type="checkbox"/> with interlock <input checked="" type="checkbox"/> without interlock		

Remark: *1) The protection class of components is dependent upon the equipment in which they are used, these connectors are intended for class I equipment normally.

Note: The free connector could be provided with dominated cable gland with/without fitting of insulation sleeving according to the actual cable size., it is expecting to be tested according to the real cable size and product standard on-site.

TÜV Rheinland

 18 October
 2018

(Date)



(Signature)

Kawasaki

(Place)

18 October 2018

(Date)

Tyco Electronics Japan G.K.

(Stamp and Signature of Applicant)



Constructional Data Form for Connector

Page 3/5

Insulation Coordination	
Overvoltage category	III II
Pollution degree	2
Insulation voltage	AC150V / 2.5kVpk AC160V / 2.5kVpk
Test voltages	Contact – Contact: 1390 Vrms Contact – Case: 2210 Vrms
Minimum creepage distances (mated)	Live Contact – Live Contact: 1.8 mm Live Contact - Accessible Area: 9.4 mm
Minimum clearance distances (mated)	Live Contact – Live Contact: 1.8mm Live Contact - Accessible Area: 8.1 mm
Insulation system (IEC 60664-1)	Contact – Contact : <input checked="" type="checkbox"/> basic <input type="checkbox"/> reinforced <input type="checkbox"/> NA Case – Contact : <input type="checkbox"/> basic <input checked="" type="checkbox"/> reinforced <input type="checkbox"/> NA

Specifications of Terminals / Connection _ <input type="checkbox"/> Rewirable <input checked="" type="checkbox"/> Non-rewirable	
Type of terminals	<input checked="" type="checkbox"/> Crimping terminal
Terminal designation	A, B, C, D, 1, 2, 3, 4, 5, 6, 7, 8
Spec. Tightening torque	N/A
Rated cross section of conductor	1827586-2(1827569-2): (AWG#30, 28) 1827587-2(1827570-2): (AWG#28, 26, 24, 22) 1903115-2(1903111-2): (AWG#30, 28) 1903116-2(1903112-2): (AWG#28, 26, 24, 22)
Type of conductor	Flexible
Required preparation of the conductor	Original crimping tool
Max. Stripping length	2.3mm
Max. Number of conductors per terminal	1

TÜV Rheinland

 18 October
 2018

(Date)



(Signature)

Kawasaki

(Place)

18 October 2018

(Date)

Tyco Electronics Japan G.K.

(Stamp and Signature of Applicant)



Constructional Data Form for Connector
Table 1 Rated current

Housing	Applicable contact	Rated current	Applicable cable
Rec Housing 1981921-1, 2013391-1	1827586-2(1827569-2)	0.5A	AWG30
	1827586-2(1827569-2)	0.5A	AWG28
	1827587-2(1827570-2)	0.5A	AWG28
	1827587-2(1827570-2)	0.8A	AWG26
	1827587-2(1827570-2)	1A	AWG24
	1827587-2(1827570-2)	1.5A	AWG22
Tab housing 2013393-1, 1981914-1	1903115-2(1903111-2)	0.5A	AWG30
	1903115-2(1903111-2)	0.5A	AWG28
	1903116-2(1903112-2)	0.5A	AWG28
	1903116-2(1903112-2)	0.8A	AWG26
	1903116-2(1903112-2)	1A	AWG24
	1903116-2(1903112-2)	1.5A	AWG22

TÜV Rheinland

 18 October
 2018

(Date)



(Signature)

Kawasaki

(Place)

18 October 2018

(Date)

Tyco Electronics Japan G.K.





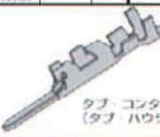
(Stamp and Signature of Applicant)








Constructional Data Form for Connector

TYPE NOMENCLATURE:

<32 poles>

<p>Pulg case 1981919-1</p> 	<p>applicable housing Rece housing 1981921-1</p> 	<p>Applicable contact D-1000 rece contact (※)</p> <table border="1"> <thead> <tr> <th>適用電線規格</th> <th>絶縁外径 mm²</th> <th>ワイヤ 径/mm</th> <th>ワイヤ レンジ マーク</th> <th colspan="2">コンタクトの形状</th> </tr> <tr> <td>AWG</td> <td>mm²</td> <td></td> <td></td> <td></td> <td></td> </tr> </thead> <tbody> <tr> <td>30</td> <td>0.05</td> <td rowspan="2">0.8-1.2</td> <td rowspan="2">S</td> <td>導線状</td> <td>1827569-2</td> </tr> <tr> <td>28</td> <td>0.09</td> <td>バラ</td> <td>1827586-2</td> </tr> <tr> <td>28</td> <td>0.08</td> <td rowspan="4">1.08-1.5</td> <td rowspan="4">M</td> <td>導線状</td> <td>1827570-2</td> </tr> <tr> <td>26</td> <td>0.12</td> <td rowspan="2">バラ</td> <td rowspan="2">1827587-2</td> </tr> <tr> <td>24</td> <td>0.20</td> </tr> <tr> <td>22</td> <td>0.38</td> </tr> </tbody> </table> 	適用電線規格	絶縁外径 mm ²	ワイヤ 径/mm	ワイヤ レンジ マーク	コンタクトの形状		AWG	mm ²					30	0.05	0.8-1.2	S	導線状	1827569-2	28	0.09	バラ	1827586-2	28	0.08	1.08-1.5	M	導線状	1827570-2	26	0.12	バラ	1827587-2	24	0.20	22	0.38
	適用電線規格	絶縁外径 mm ²	ワイヤ 径/mm	ワイヤ レンジ マーク	コンタクトの形状																																	
AWG	mm ²																																					
30	0.05	0.8-1.2	S	導線状	1827569-2																																	
28	0.09			バラ	1827586-2																																	
28	0.08	1.08-1.5	M	導線状	1827570-2																																	
26	0.12			バラ	1827587-2																																	
24	0.20																																					
22	0.38																																					
	<p>tab housing 2013393-1</p> 	<p>D-1000 tab contact (※)</p> <table border="1"> <thead> <tr> <th>適用電線規格</th> <th>絶縁外径 mm²</th> <th>ワイヤ 径/mm</th> <th>ワイヤ レンジ マーク</th> <th colspan="2">コンタクトの形状</th> </tr> <tr> <td>AWG</td> <td>mm²</td> <td></td> <td></td> <td></td> <td></td> </tr> </thead> <tbody> <tr> <td>30</td> <td>0.05</td> <td rowspan="2">0.8-1.2</td> <td rowspan="2">S</td> <td>導線状</td> <td>1903111-2</td> </tr> <tr> <td>28</td> <td>0.09</td> <td>バラ</td> <td>1903115-2</td> </tr> <tr> <td>26</td> <td>0.12</td> <td rowspan="3">1.08-1.6</td> <td rowspan="3">M</td> <td>導線状</td> <td>1903112-2</td> </tr> <tr> <td>24</td> <td>0.20</td> <td rowspan="2">バラ</td> <td rowspan="2">1903116-2</td> </tr> <tr> <td>22</td> <td>0.38</td> </tr> </tbody> </table> 	適用電線規格	絶縁外径 mm ²	ワイヤ 径/mm	ワイヤ レンジ マーク	コンタクトの形状		AWG	mm ²					30	0.05	0.8-1.2	S	導線状	1903111-2	28	0.09	バラ	1903115-2	26	0.12	1.08-1.6	M	導線状	1903112-2	24	0.20	バラ	1903116-2	22	0.38		
適用電線規格	絶縁外径 mm ²	ワイヤ 径/mm	ワイヤ レンジ マーク	コンタクトの形状																																		
AWG	mm ²																																					
30	0.05	0.8-1.2	S	導線状	1903111-2																																	
28	0.09			バラ	1903115-2																																	
26	0.12	1.08-1.6	M	導線状	1903112-2																																	
24	0.20			バラ	1903116-2																																	
22	0.38																																					

connectivity

<p>applicable housing tab housing 1981914-1</p> 	<p>Applicable contact D-1000 tab contact (※)</p> <table border="1"> <thead> <tr> <th>適用電線規格</th> <th>絶縁外径 mm²</th> <th>ワイヤ 径/mm</th> <th>ワイヤ レンジ マーク</th> <th colspan="2">コンタクトの形状</th> </tr> <tr> <td>AWG</td> <td>mm²</td> <td></td> <td></td> <td></td> <td></td> </tr> </thead> <tbody> <tr> <td>30</td> <td>0.05</td> <td rowspan="2">0.8-1.2</td> <td rowspan="2">S</td> <td>導線状</td> <td>1903111-2</td> </tr> <tr> <td>28</td> <td>0.09</td> <td>バラ</td> <td>1903115-2</td> </tr> <tr> <td>28</td> <td>0.08</td> <td rowspan="3">1.08-1.6</td> <td rowspan="3">M</td> <td>導線状</td> <td>1903112-2</td> </tr> <tr> <td>26</td> <td>0.12</td> <td rowspan="2">バラ</td> <td rowspan="2">1903116-2</td> </tr> <tr> <td>24</td> <td>0.20</td> </tr> <tr> <td>22</td> <td>0.38</td> </tr> </tbody> </table> 	適用電線規格	絶縁外径 mm ²	ワイヤ 径/mm	ワイヤ レンジ マーク	コンタクトの形状		AWG	mm ²					30	0.05	0.8-1.2	S	導線状	1903111-2	28	0.09	バラ	1903115-2	28	0.08	1.08-1.6	M	導線状	1903112-2	26	0.12	バラ	1903116-2	24	0.20	22	0.38	<p>Jack case 1981913-1</p> 
適用電線規格	絶縁外径 mm ²	ワイヤ 径/mm	ワイヤ レンジ マーク	コンタクトの形状																																		
AWG	mm ²																																					
30	0.05	0.8-1.2	S	導線状	1903111-2																																	
28	0.09			バラ	1903115-2																																	
28	0.08	1.08-1.6	M	導線状	1903112-2																																	
26	0.12			バラ	1903116-2																																	
24	0.20																																					
22	0.38																																					
<p>Rece housing 2013391-1</p> 	<p>D-1000 rece contact (※)</p> <table border="1"> <thead> <tr> <th>適用電線規格</th> <th>絶縁外径 mm²</th> <th>ワイヤ 径/mm</th> <th>ワイヤ レンジ マーク</th> <th colspan="2">コンタクトの形状</th> </tr> <tr> <td>AWG</td> <td>mm²</td> <td></td> <td></td> <td></td> <td></td> </tr> </thead> <tbody> <tr> <td>30</td> <td>0.05</td> <td rowspan="2">0.8-1.2</td> <td rowspan="2">S</td> <td>導線状</td> <td>1827569-2</td> </tr> <tr> <td>28</td> <td>0.09</td> <td>バラ</td> <td>1827586-2</td> </tr> <tr> <td>28</td> <td>0.08</td> <td rowspan="4">1.08-1.5</td> <td rowspan="4">M</td> <td>導線状</td> <td>1827570-2</td> </tr> <tr> <td>26</td> <td>0.12</td> <td rowspan="2">バラ</td> <td rowspan="2">1827587-2</td> </tr> <tr> <td>24</td> <td>0.20</td> </tr> <tr> <td>22</td> <td>0.38</td> </tr> </tbody> </table> 	適用電線規格	絶縁外径 mm ²	ワイヤ 径/mm	ワイヤ レンジ マーク	コンタクトの形状		AWG	mm ²					30	0.05	0.8-1.2	S	導線状	1827569-2	28	0.09	バラ	1827586-2	28	0.08	1.08-1.5	M	導線状	1827570-2	26	0.12	バラ	1827587-2	24	0.20	22	0.38	
適用電線規格	絶縁外径 mm ²	ワイヤ 径/mm	ワイヤ レンジ マーク	コンタクトの形状																																		
AWG	mm ²																																					
30	0.05	0.8-1.2	S	導線状	1827569-2																																	
28	0.09			バラ	1827586-2																																	
28	0.08	1.08-1.5	M	導線状	1827570-2																																	
26	0.12			バラ	1827587-2																																	
24	0.20																																					
22	0.38																																					

TÜV Rheinland

Kawasaki

18 October 2018

18 October
2018

(Place)

(Date)

(Date)

(Signature)

Tyco Electronics Japan G.K.

(Stamp and Signature of Applicant)