Part Submission Warrant



Part Name		TERMINAL		Cust F	Part Number		1C1T-14	474-44
Shown on Drawing N		97BG-14474-CDA			Org. Part Number		7116-4143-02	
Engineering Change			1784007-263		Dated		07-11-	-
Additional Engineerin		G/ALLE E	N/A		_ Dated	-	N/A	2010
•	•		_		_	N/A		0,0012
Safety and/or Govern	•	☐ Yes ☑	-	chase Order I	No	N/A N/A	Weight (kg)	
Checking Aid No.	N/A		Ingineering Change Leve				Dated _	N/A
ORGANIZATION MA YAZAKI EUROP	NUFACTURING INFOR	RMATION	323047696	CUSTON NURSA	IER SUBMITTA 11 A/	L INFORMA	TION	
	Supplier/Vendor Code		323047090	NUNSA	-1/V			
Robert Bosch S	trasse., 43			D	was Cada			
Street Address Cologne	NRW	D-50769	Germany	Buyer/Bu	yer Code			
City	Region	Postal Code	Country	1 0112				
MATERIALS REPOR	TING							
Has customer-require	ed Substances of Conce	ern information been reported?			✓ Yes	☐ No	□ n/a	3
	Submi	tted by IMDS or other customer	format:		IMDS			
		•			IMDS ID: 1	10016166	i	
Are polymeric parts in	dentified with appropriat	e ISO marking codes?			Yes	☐ No	□ n/a	3
Initial submi Engineering Tooling: Tra Correction of	Change(s)	st one) efurbishment, or additional				ntional Constructional Source aterial Source of Processing and at Addition as specify below	ruction or Material e Change g al Location	
Level 1 - Wa Level 2 - Wa Level 3 - Wa Level 4 - Wa	arrant with product sam arrant with product sam arrant and other require	one) gnated appearance items, an Apples and limited supporting data ples and complete supporting da ments as defined by customer. ples and complete supporting da	submitted to customer. ta submitted to customer.					
SUBMISSION RESU	LTS							
The results for These results meet a Mold / Cavity / Production	dimensional measu Il drawing and specifica ction Process		ial and functional tests	Yes	appearan	ce criteria (If "NO" - Ex	xplanation Required)	statistical process package
Manual 4th Edition R	equirements. I further a	warrant are representative of ou of our of our	oduced at the production	rate of 115,2	200 / 4 hours.			
EXPLANATION/COM	IMENTS:							
Is each Customer To	ol properly tagged and i	numbered?		Yes	☐ No	✓ n/a		
Organization Authoriz	zed Signature	Dorinda Sa	ntos				Date	12 October 2016
Print Name	Dorinda Santos	_	Phone No. + 3	351 256 24	16 908	_	FAX No. 351 256	246 892
Title QE			E-mail <u>dor</u>	inda.santo	s@yazaki-eı	urope.com		
		FOR CUS	TOMER USE ONLY (IF A	PPLICABLE))			
PPAP Warrant Dispo	sition:	Approved Reject	_					
Customer Signature							Date	
Print Name			0	ustomer Trac	cking No. (option	nal)	- ****	
	-				(001101	,		_



Sample Component Inspection Report

CUSTOMER PART NO.	1C1T-14474-AA	CCC PART NO.	7116-4143-02
CUSTOMER	FORD	PART NAME	TRMNL WIR SNP ON FEM
SUPPLIER	Circuit Controls	B/P DATE	11/7/13
DIE/MOLD NO.	2D4140	ECR/PCR	AELE-E-11784007-263
NUMBER CAVITIES	Progressive Die	☐ PRODUCTION	PROTOTYPE

DIM#	DRAWING DIMENSION	TOLERANCE	RESULTS	
1	2.00	+/-0.15	2.00	
2	2.00	+/-0.15	2.00	
3	4.30	+/-0.15	4.30	
4	1.50	+/-0.15	1.51	
5	22.10	+/-0.10	22.10	
6	8.70	+/-0.30	8.64	
7	24.30	+/-0.40	23.90	
8	11.00	+/-0.30	11.10	
9	4.50	+/-0.20	4.54	
10	3.00	+/-0.20	3.06	
11	1.50	+/-0.10	1.45	
12	4.90	+/-0.30	4.94	
13	2.70	+0.05/-0.15	2.62	
14	7.50	+0.05/-0.15	7.46	
15	3.40	+0.05/-0.15	3.38	
16	2.90	+/-0.15	2.95	
17	3.80	+0.05/-0.15	3.77	
18	4.60	+/-0.15	4.61	
19	1.00	+/-0.20	1.11	
20	3.20	+/-0.30	3.22	
21	Material thickness t=0.40		0.395	
22	5.60	+/-0.20	5.72	
23	30 °	+/ -5 °	28°	
24	1.35R	+/-0.15	1.37R	
25	9.10	+/-0.20	9.08	
26	30 °	+/ -5 °	28°	
27	2.90R	+/-0.15	2.97R	
28	Mating effort	14.00N max.	11.06N	
29	Part free from burrs or sharp edges		OK	
30	Material: TP Copper Alloy		OK	
31	O Detents		0 OK	

Inspected By:M. SimowskiDate: 3/08/16Q.E. Approval:Gary T. MasonDate: 3/14/16



Sample Component Inspection Report

CUSTOMER PART NO. 1C1T-14474-AA CCC PART NO. 7116-4143-02 TRMNL WIR SNP ON **CUSTOMER FORD PART NAME FEM SUPPLIER Circuit Controls** 11/7/13 **B/P DATE** 3D4140 AELE-E-11784007-263 ECR/PCR DIE/MOLD NO. **◯** PRODUCTION PROTOTYPE **NUMBER CAVITIES Progressive Die**

DIM#	DRAWING DIMENSION	TOLERANCE	RESULTS	
1	2.00	+/-0.15	2.01	
2	2.00	+/-0.15	2.01	
3	4.30	+/-0.15	4.30	
4	1.50	+/-0.15	1.45	
5	22.10	+/-0.10	22.12	
6	8.70	+/-0.30	8.73	
7	24.30	+/-0.40	24.01	
8	11.00	+/-0.30	11.10	
9	4.50	+/-0.20	4.52	
10	3.00	+/-0.20	3.10	
11	1.50	+/-0.10	1.47	
12	4.90	+/-0.30	4.92	
13	2.70	+0.05/-0.15	2.66	
14	7.50	+0.05/-0.15	7.46	
15	3.40	+0.05/-0.15	3.36	
16	2.90	+/-0.15	2.98	
17	3.80	+0.05/-0.15	3.76	
18	4.60	+/-0.15	4.60	
19	1.00	+/-0.20	1.09	
20	3.20	+/-0.30	3.23	
21	Material thickness t=0.40		0.398	
22	5.60	+/-0.20	5.61	
23	30°	+/ -5 °	28°	
24	1.35R	+/-0.15	1.33R	
25	9.10	+/-0.20	9.01	
26	30°	+/ -5 °	28°	
27	2.90R	+/-0.15	2.95R	
28	Mating effort	14.00N max.	12.45N	
29	Part free from burrs or sharp edges		OK	
30	Material: TP Copper Alloy		OK	
31	O Detents		0 OK	

Inspected By:M. SimowskiDate: $\frac{4/15/16}{5/3/16}$ Q.E. Approval:Gary T. MasonDate: $\frac{5/3/16}{5}$

160181

CERTIFICATION REPORT

AAurubis

				Irudi5	
SOLD TO CIRCUIT CONTROLS CORP. 2277 M-119 HIGHWAY PETOSKEY, MI 49770	1	CONTROLS CORP. 9 HIGHWAY Y, MI	49770	ENTRY - BOL 61889-407580 ALLOY	
PRODUCT DESCRIPTION		QUANTITY ORDERED	1	KLF5 CUSTOMER ORDER NO.	
5.8750 .01570 H04 PHOS BRONZE KLF-5 STRIP *REFLOW* P/N 2924-4000-3520 DATED 6/06/00		PCS.	PCS. 2	OUTO-3/PULL	
(1.3858)	!	LBS. 999000	DATE 3/10/2016 TIME 8:52:24 AM	GOVT CONTRACT NO.	

COIL NUMBER	704853	736500AA	736500AB	704854	736628BB	
COMPOSITION - %				-		
Copper	97.61	97.57	97.57	97.61	97.57	
Iron	.096	.090	.090	.096	.110	
Phosphorous	.032	.032	.032	.032	.033	
Tin	2.08	2.10	2.10	2.08	2.08	
PROPERTIES	i		<u> </u>			
Tensile Str. (N/mm²)	572.2	576.4	576.4	572.2	585.3	
Elongation (%)	8.3	9.8	9.8	8.3	11.1	
Grain Size (RTF) in mm	.010	.010	.010	.010	.010	
Vickers	171	174	174	171	174	
Bend Test (L)	ок	ОК	ок	ОК	ок	
Bend Test (T)	ок	ОК	ОК	ок	ок	
Elec. Cond. (%) IACS	36.2	36.4	36.4	36.2	36.1	
RA Side-A (µm)	.0	1.0	.0	.o	.0	_
RA Side-B (µm)	.0	0.	.0	l.o	.0	
Coating Thickness (µm)	1.1	1.2	1.3	1.3	1.2	
Spring Limit (N/mm²)	481.8	508.7	508.7	481.8	479.8	
Gauge in mm	.39878	.39878	.39878	39878	.39116	

Certification Report continues on the next page.

160181

CERTIFICATION REPORT

AAurubis

SOLD TO CIRCUIT CONTROLS CORP. 2277 M-119 HIGHWAY		CONTROLS CORP. 9 HIGHWAY		ENTRY - BOL 61889-407580 ALLOY KLF6
PETOSKEY, MI 49770	PETOSKE	Y, MI	49770	
PRODUCT DESCRIPTION		QUANTITY ORDERED		CUSTOMER ORDER NO
5.8750 .01570 H04 PHOS BRONZE KLF-5 STRIP *REFLOW* P/N 2924-4000-3520 DATED 6/06/00		PCS.	PCS. 2	OUTO-3/PULL
1.3858)		LBS. 999000	DATE 3/10/2016 TIME 8:52:33 AM	GOVT CONTRACT NO.

COIL NUMBER	736741BA	736501AB	736741BB	736501AA		
COMPOSITION - %						
Copper	97.58	97.57	97.58	97.57		
Iron	.095	.090	.095	.090		
Phosphorous	.037	.032	.037	.032		
Tin	2.15	2.10	2.15	2.10		
PROPERTIES					<u>- </u>	
Tensile Str. (N/mm²)	568.8	577.0	568.8	577.0		1
Elongation (%)	10.8	11.6	10.8	11.6		1
Grain Size (RTF) in mm	.010	.010	.010	.010		
Vickers	176	171	176	171		
Bend Test (L)	ок	ОК	ок	ок]
Bend Test (T)	ок	ок	ОК	ОК		
Elec. Cond. (%) IACS	36.2	36.5	36.2	36.5	1	
RA Side-A (μm)	.0	1.1	.0	1	Ì	1
RA Side-B (µm)	.0	1.1	.0	[1		
Coating Thickness (µm)	1.2	1.2	1.2	1.2	İ	
Spring Limit (N/mm²)	478.8	488.7	478.8	488.7	1	
Sauge in mm	.40005	.39446	.40005	39446	1	

WE HEREBY CERTIFY that these test results were obtained from samples taken from coil(s), which were produced for the purchase order stated. These samples have been subjected to the tests called for by the customer and /or ASTM specification(s).

This product was manufactured in compliance with all applicable government and safety constraints on restricted, toxic, and hazardous materials and complies to the Restriction of Hazardous Substances (RoHS2) Directive 2011/65/EU and the Consumer Product Safety Improvement Act of 2008. Aurubis Buffalo, Inc. product Material Safety Data Sheets (MSDS) provides component information for all hazardous materials in conformance with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Technical Department - Lawrence Wypij

