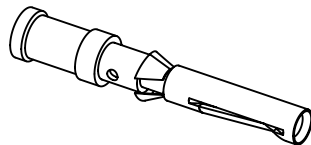

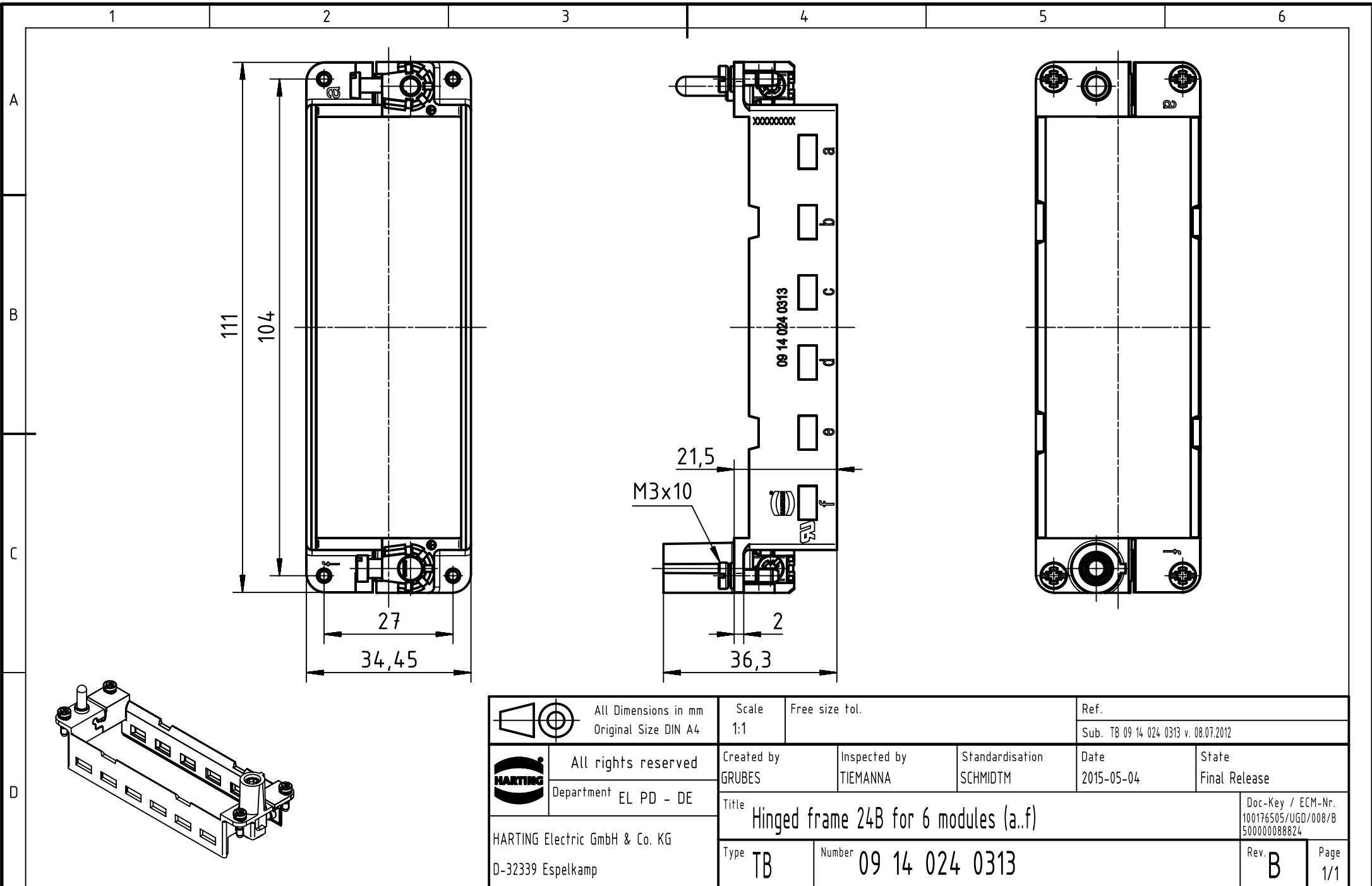



① only for four indent crimping tool adjusting Ø0,1

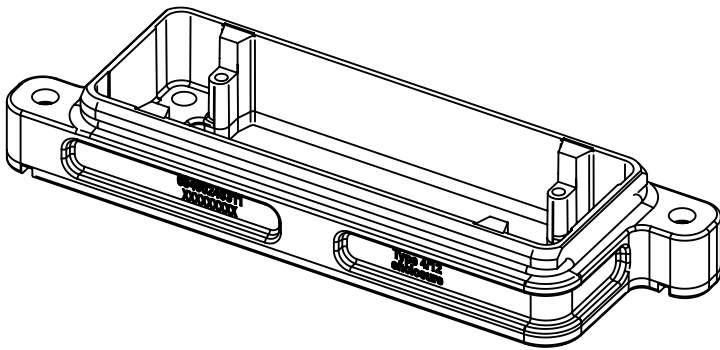
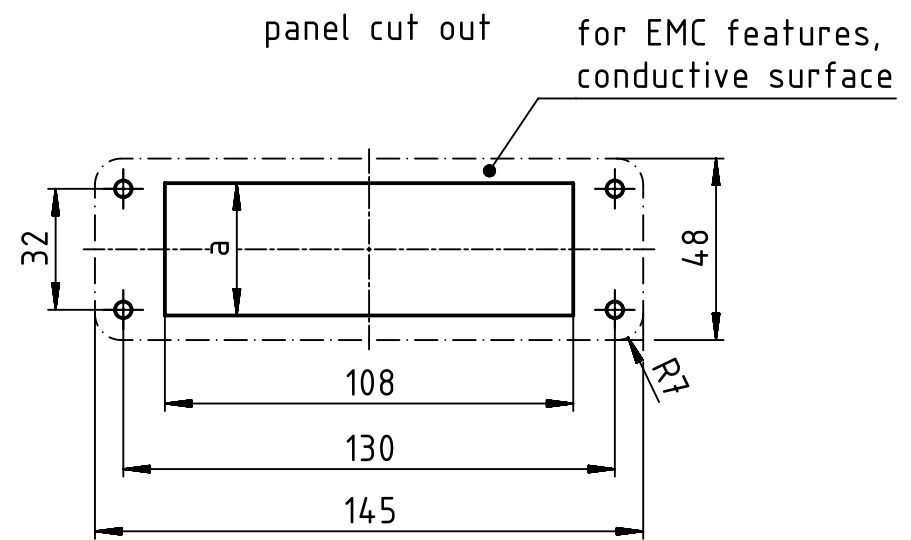
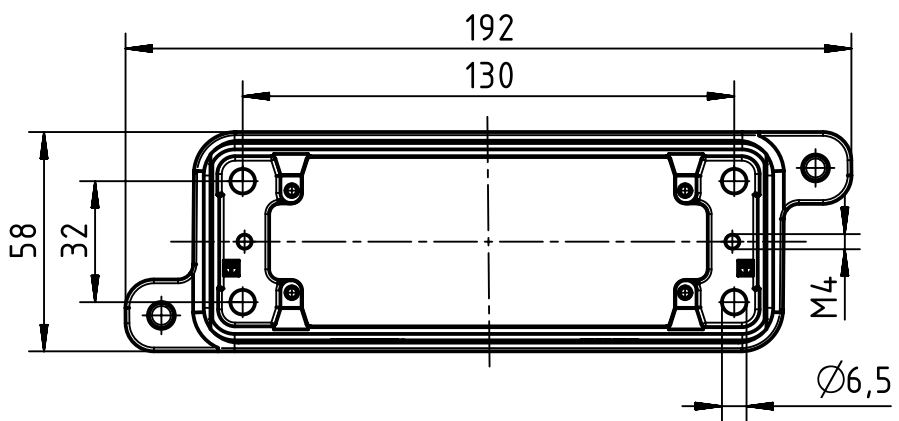
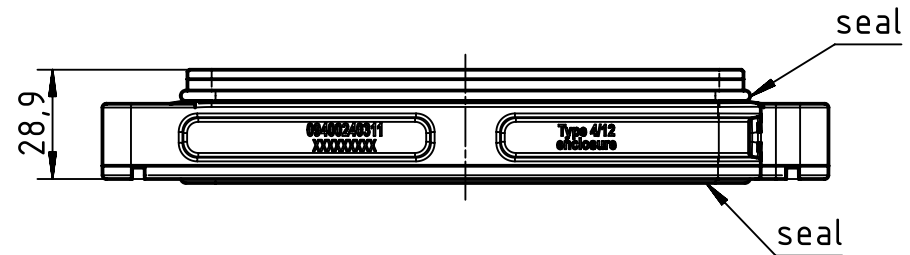
part no.		ØD	wire gauge		stripping length	
silver plated	gold plated		mm²	AWG		
09 15 000 6204	09 15 000 6224	0,90	0,14-0,37	26-22	8	
09 15 000 6203	09 15 000 6223	1,10	0,5	20		
09 15 000 6205	09 15 000 6225	1,30	0,75	18		
09 15 000 6202	09 15 000 6222	1,45	1	18		
09 15 000 6201	09 15 000 6221	1,75	1,5	16		
09 15 000 6206	09 15 000 6226	2,25	2,5	14	6	
09 15 000 6207	09 15 000 6227	0,90	0,14-0,37	26-22	8	①



	All Dimensions in mm Original Size DIN A4		Scale 2:1	Free size tol.		Ref. Sub. TB 09 15 000 62.. v. 16.06.10	
	All rights reserved Department EL PD - DE		Created by RULLKOETTER	Inspected by SCHNIEDER	Standardisation TIEMANNA	Date 2014-05-20	State Final Release
HARTING Electric GmbH & Co. KG D-32339 Espelkamp		Title Han D crimp contacts female				Doc-Key / ECM-Nr. 100109246/UGD/004/A 500000075030	
		Type TB	Number 09 15 000 62XX			Rev. A	Page 1/1



	All rights reserved Department EL PD - DE	All Dimensions in mm Original Size DIN A4		Scale 1:1	Free size tol.	Ref. Sub. TB 09 14 024 0313 v. 08.07.2012	
		Created by GRUBES	Inspected by TIEMANNA	Standardisation SCHMIDTM	Date 2015-05-04	State Final Release	
HARTING Electric GmbH & Co. KG D-32339 Espelkamp		Title Hinged frame 24B for 6 modules (a.f)				Doc-Key / ECM-Nr. 100176505/UGD/008/B 500000088824	
		Type TB	Number 09 14 024 0313		Rev. B	Page 1/1	



application	a
standard insert	35
HC-Modular 650	44,5

	All Dimensions in mm Original Size DIN A4		Scale 1:2	Free size tol.		Ref.
	All rights reserved Department EL PD - DE		Created by FINKEV	Inspected by GERB	Standardisation TIEMANNA	Sub.
HARTING Electric GmbH & Co. KG D-32339 Espelkamp		Title Han 24HPR Base Panel Screw locking			Date 2015-11-13	State Final Release
Type TB	Number 09 40 024 0311		Doc-Key / ECM-Nr. 100217699/UGD/004/C 500000093625		Rev. C	Page 1/1

TRENES ARGENTINOS OPERACIONES

DOCUMENTACIÓN TÉCNICA PARA COMPRA

NUM43360810360N

Descripción: Conector macho aéreo, 2 polos, 200A, 1000V, salida recta M32, sección 25-40mm². Conector para cable de entre coches XSP95. Fichas y terminales. Cables y accesorios. Sistema colector y distribución. CCEE CSR.

Plano N°: No Corresponde

Planos concatenados N°: No Corresponde

Referencia de fábrica: (Descrito en hoja 2)

Especificación Técnica: ET MRR/G-007, última emisión.

Norma de aplicación: No Corresponde

Inserto contacto Macho para conectores de entre coche XSP95.

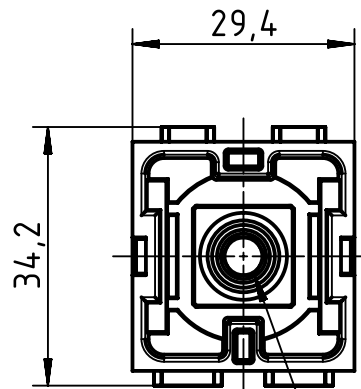
Función:

	ELABORÓ	REVISÓ	APROBÓ
NOMBRE	G. Barborini	Ing. H. Baigorria	Ing. C. Valdes Lazo
FIRMA	-	-	-

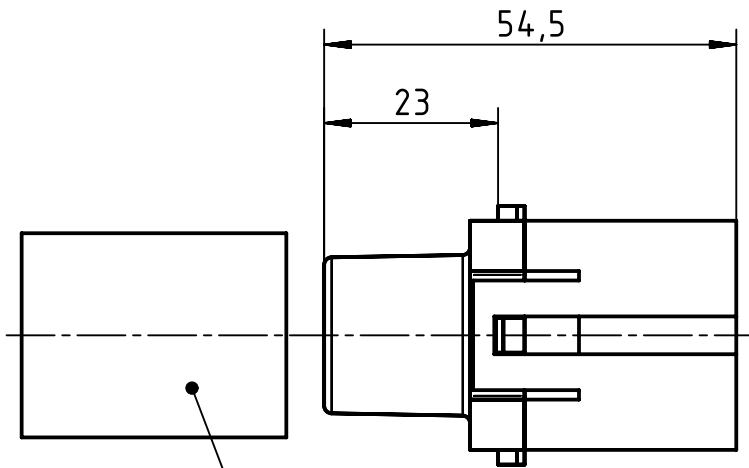


CONFORMADO POR:

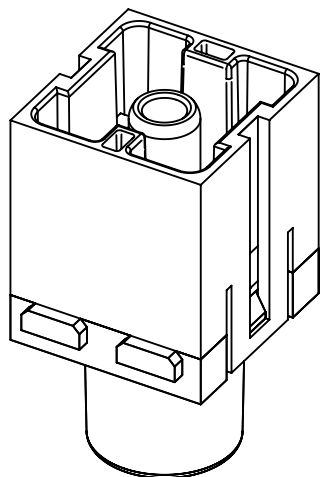
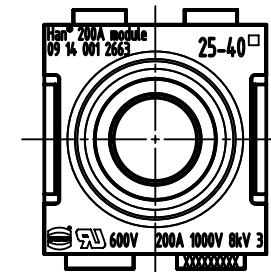
- RF: 09 14 001 2663 - Cantidad 2 (Harting)
- RF: 09 14 024 0303 - Cantidad 1 (Harting)
- RF: 09 14 000 9950 - Cantidad 2 (Harting)
- RF: 19 40 024 0412 - Cantidad 1 (Harting)

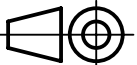



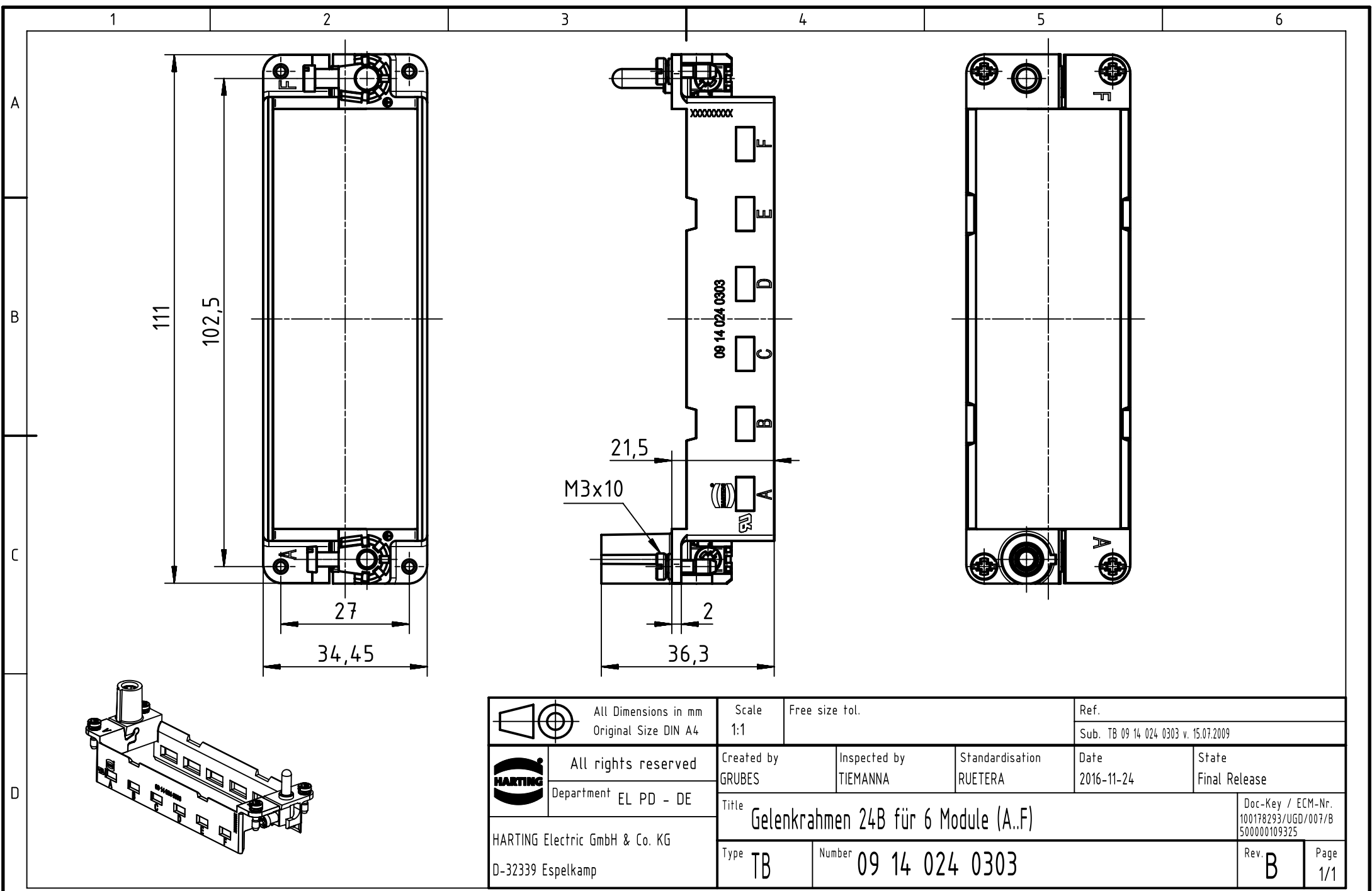
SW5



heat shrink tube



	All Dimensions in mm Original Size DIN A4		Scale 1:1	Free size tol.		Ref.	
						Sub.	
	All rights reserved Department EL PD - DE		Created by FINKEV	Inspected by BERGHORN	Standardisation TIEMANNA	Date 2016-08-19	State Final Release
	HARTING Electric GmbH & Co. KG D-32339 Espelkamp		Title Han 200A axial module, male 25-40 mm ²			Doc-Key / ECM-Nr. 100132868/UGD/007/B 500000107871	
			Type TB	Number 09 14 001 2663		Rev. B	Page 1/1



	All Dimensions in mm Original Size DIN A4		Scale 1:1	Free size tol.		Ref. Sub. TB 09 14 024 0303 v. 15.07.2009		
		All rights reserved Department EL PD - DE		Created by GRUBES	Inspected by TIEMANNA	Standardisation RUETERA	Date 2016-11-24	State Final Release
HARTING Electric GmbH & Co. KG D-32339 Espelkamp				Title Gelenkrahmen 24B für 6 Module (A..F)			Doc-Key / ECM-Nr. 100178293/UGD/007/B 500000109325	
				Type TB	Number 09 14 024 0303		Rev. B	Page 1/1

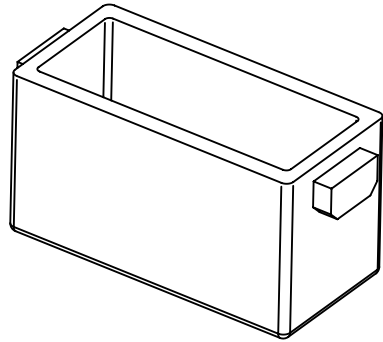
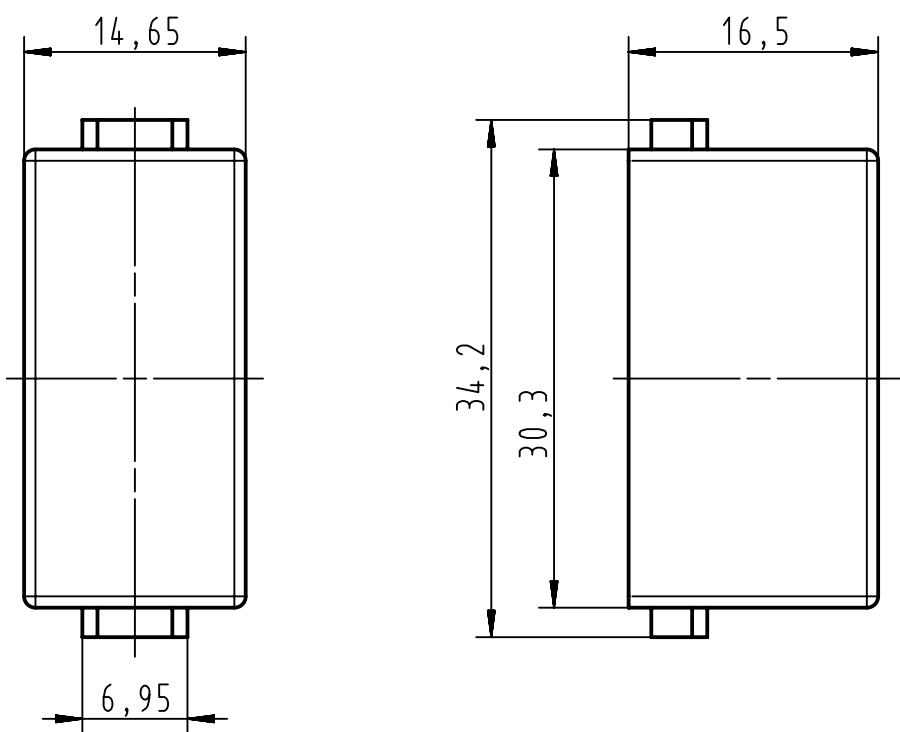
1 2 3 4 5 6


A

B

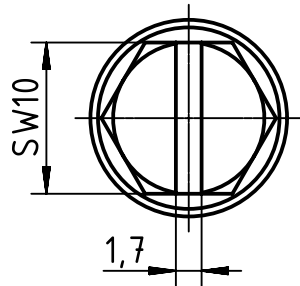
C

D

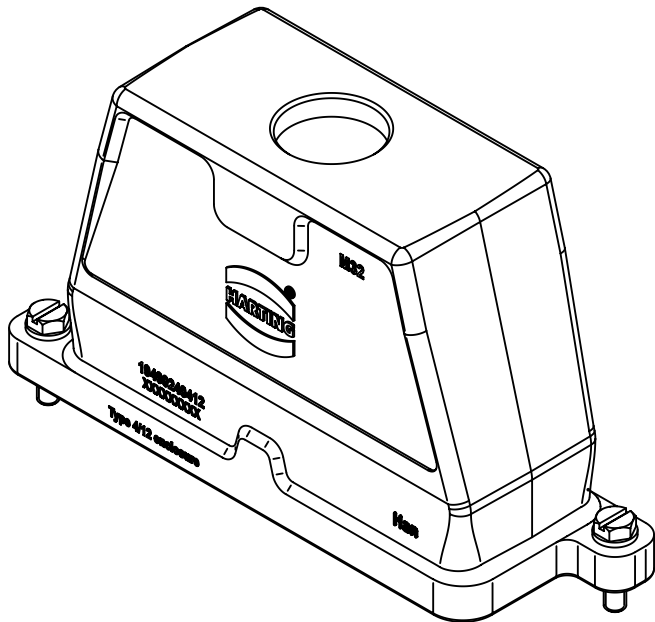
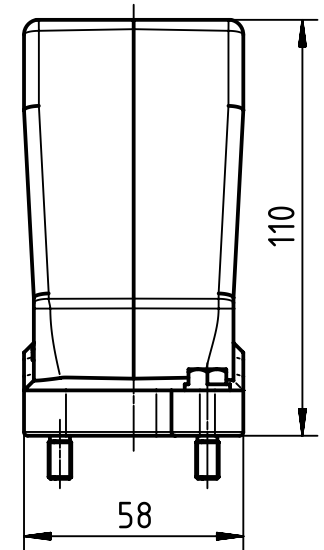
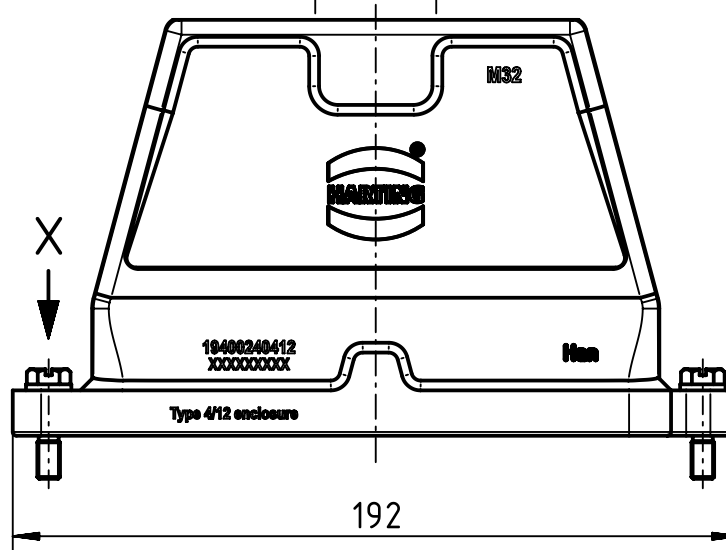


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	HARTING Electric GmbH & Co. KG D-32339 Espelkamp		Title Han-Modular Dummy Module			Doc-Key / ECM-Nr. 100220135/UGD/003/B 500000058661		
			Type TB	Number 09 14 000 9950			Rev. B	Page 1/1

X (2:1)



M32x1,5



	All Dimensions in mm Original Size DIN A4		Scale 1:2	Free size tol.		Ref. Sub. TB 19 40 024 0412 v. 10.01.11		
		All rights reserved Department EL PD - DE		Created by FINKEV	Inspected by GERB	Standardisation TIEMANNA	Date 2015-11-13	State Final Release
Title Han 24 HPR Hood Top Entry M32 Screw Lock						Doc-Key / ECM-Nr. 100201948/UGD/004/B 500000094164		
HARTING Electric GmbH & Co. KG D-32339 Espelkamp				Type TB	Number 19 40 024 0412		Rev. B	Page 1/1

TRENES ARGENTINOS OPERACIONES

DOCUMENTACIÓN TÉCNICA PARA COMPRA

NUM43360810370N

Descripción: Conector p/chasis, hembra, 2 polos, 200A, 1000V, sección 25-40mm². Conector para cable de entre coches XSP96. Fichas y terminales. Cables y accesorios. Sistema colector y distribución. CCEE CSR.

Plano N°: *No Corresponde*

Planos concatenados N°: *No Corresponde*

Referencia de fábrica: *(Descripto en hoja 2)*

Especificación Técnica: *ET MRR/G-007, última emisión.*

Norma de aplicación: *No Corresponde*

Inserto contacto Hembra para conectores de entre coche XSP96.

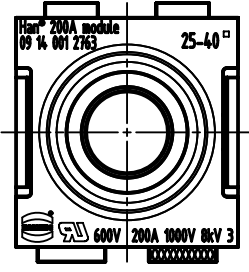
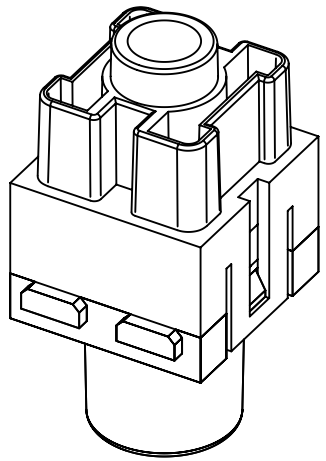
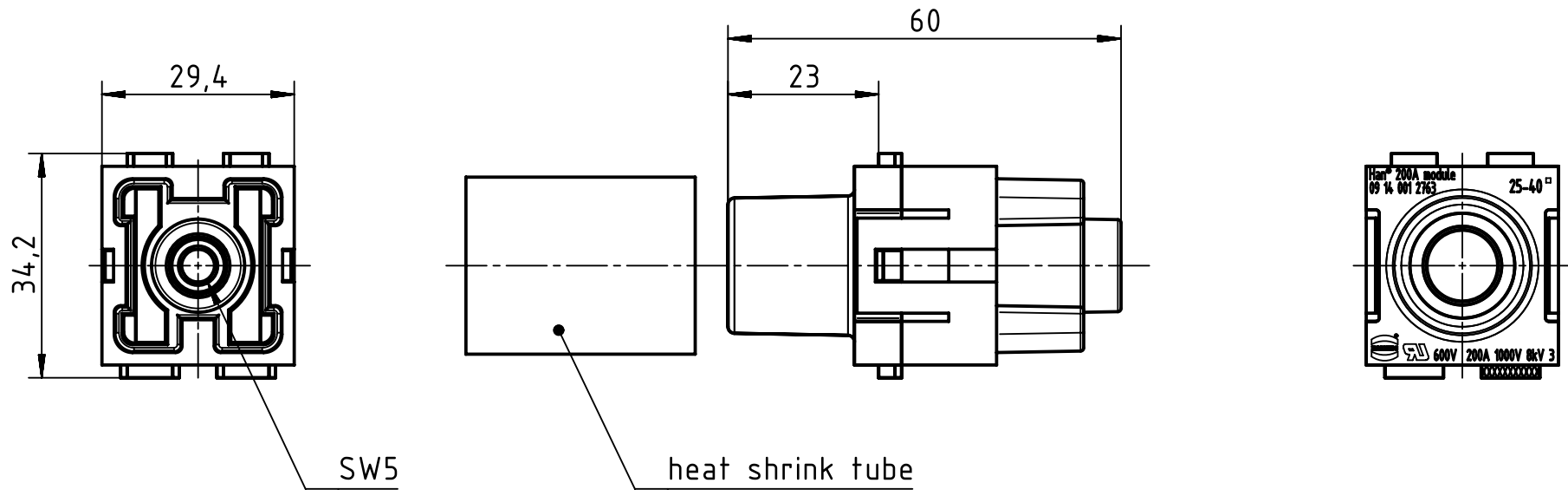
Función:

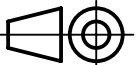

	ELABORÓ	REVISÓ	APROBÓ
NOMBRE	G. Barborini	Ing. H. Baigorria	Ing. C. Valdes Lazo
FIRMA	-	-	-

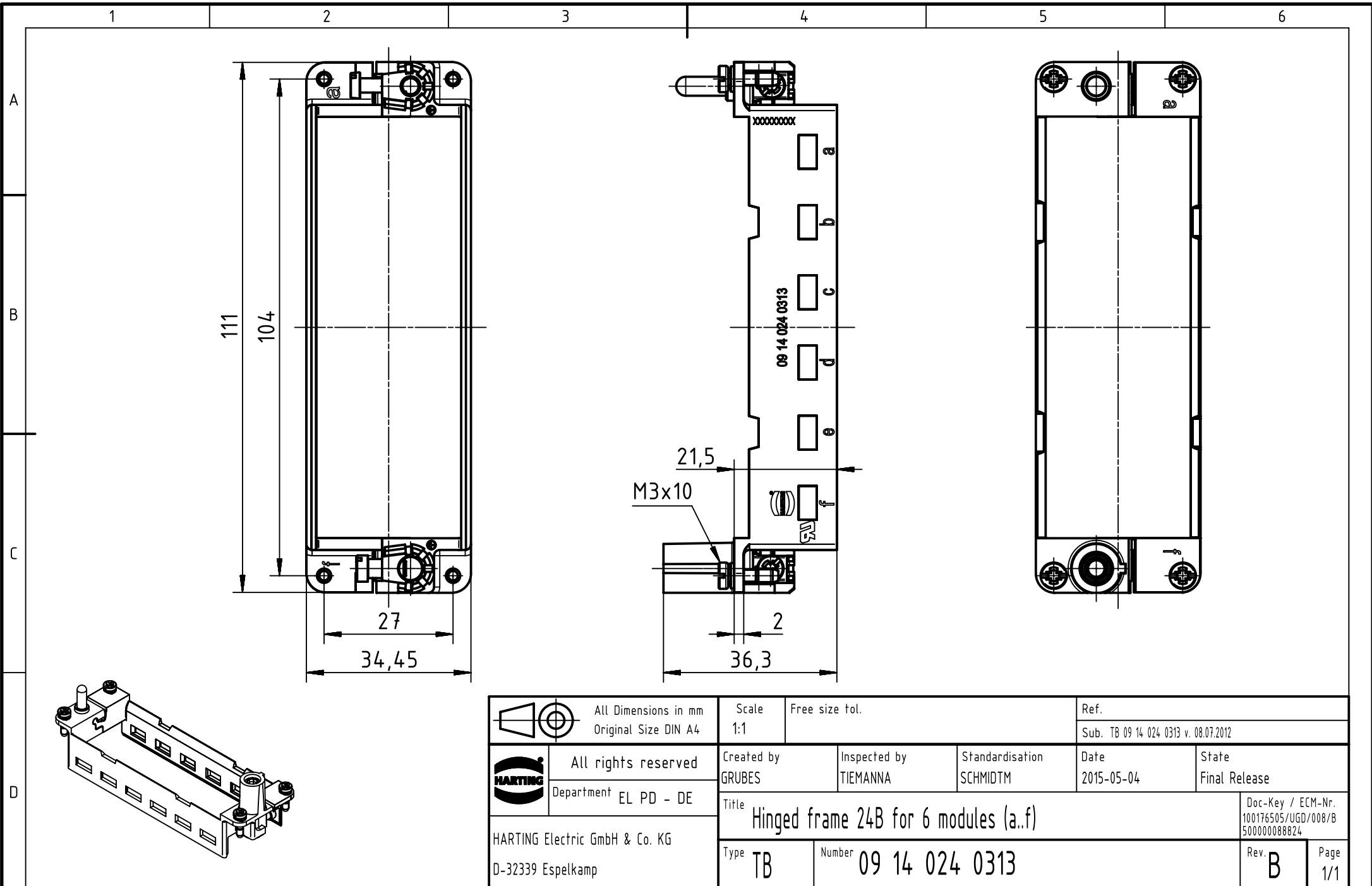



CONFORMADO POR:

- RF: 09 14 001 2763 (Harting)
- RF: 09 14 024 0313 (Harting)
- RF: 09 14 000 9950 (Harting)
- RF: 09 40 024 0311 (Harting)



 All Dimensions in mm Original Size DIN A4	Scale	Free size tol.			Ref.
	1:1				Sub.
 All rights reserved Department EL PD - DE	Created by	Inspected by	Standardisation	Date	State
	RULLKOETTER	SCHNIEDER	TIEMANNA	2014-06-11	Final Release
HARTING Electric GmbH & Co. KG D-32339 Espelkamp	Title Han 200A axial module, female 25-40 mm ²				Doc-Key / ECM-Nr.
	Type	Number			Rev.
TB	09 14 001 2763			B	1/1



	All rights reserved Department EL PD - DE	All Dimensions in mm Original Size DIN A4		Scale 1:1	Free size tol.	Ref. Sub. TB 09 14 024 0313 v. 08.07.2012	
		Created by GRUBES	Inspected by TIEMANNA	Standardisation SCHMIDTM	Date 2015-05-04	State Final Release	
HARTING Electric GmbH & Co. KG D-32339 Espelkamp		Title Hinged frame 24B for 6 modules (a.f)				Doc-Key / ECM-Nr. 100176505/UGD/008/B 500000088824	
		Type TB	Number 09 14 024 0313		Rev. B	Page 1/1	

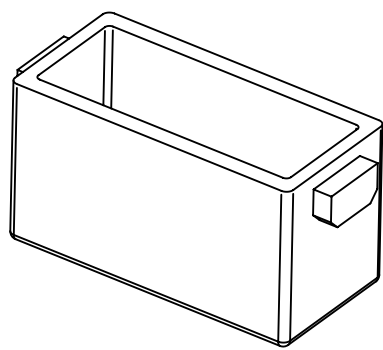
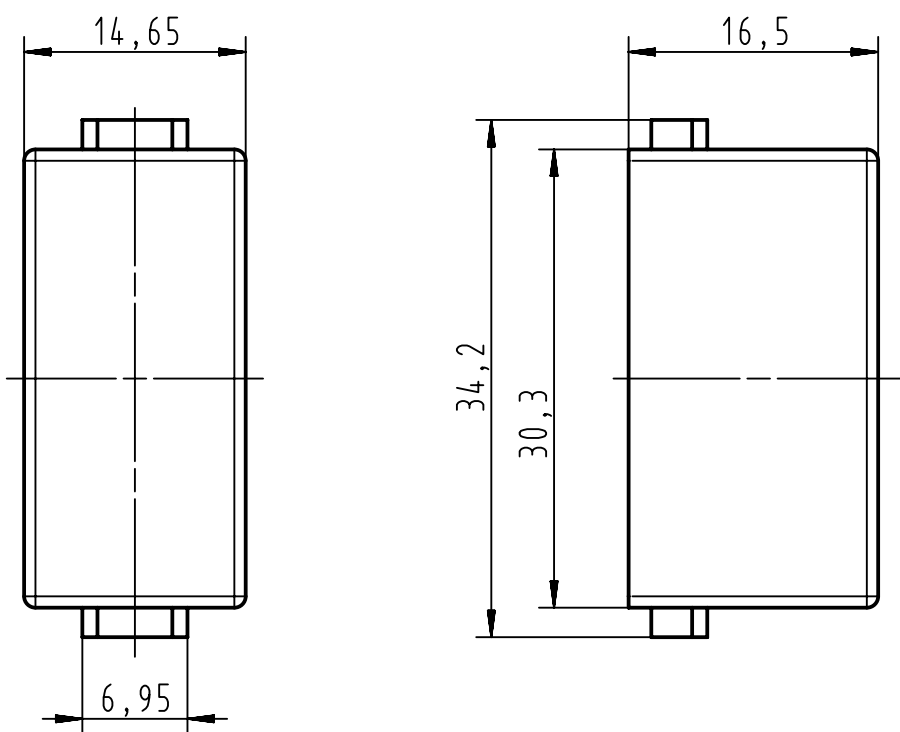
1 2 3 4 5 6


A

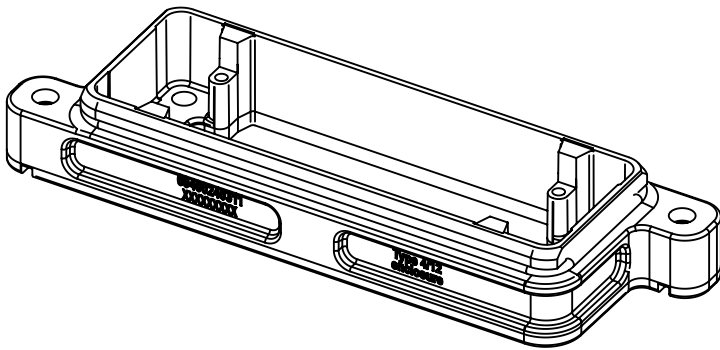
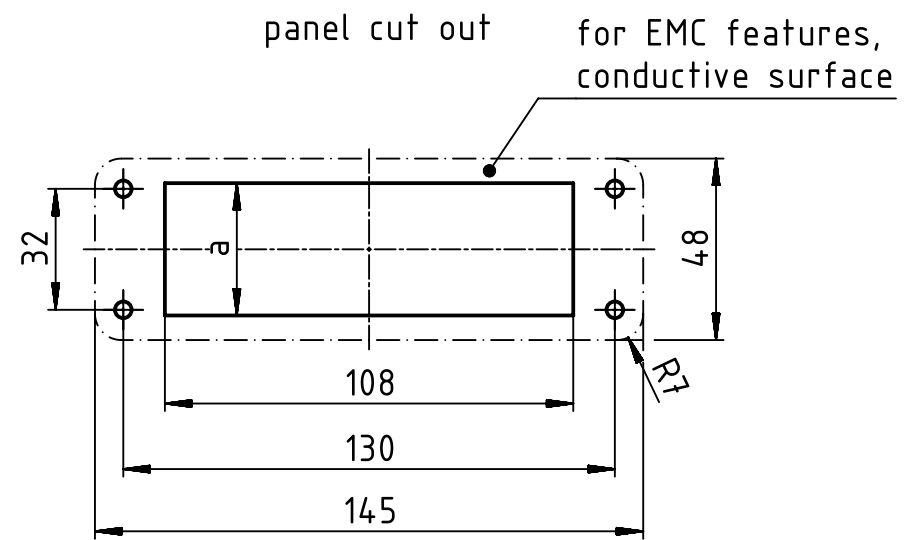
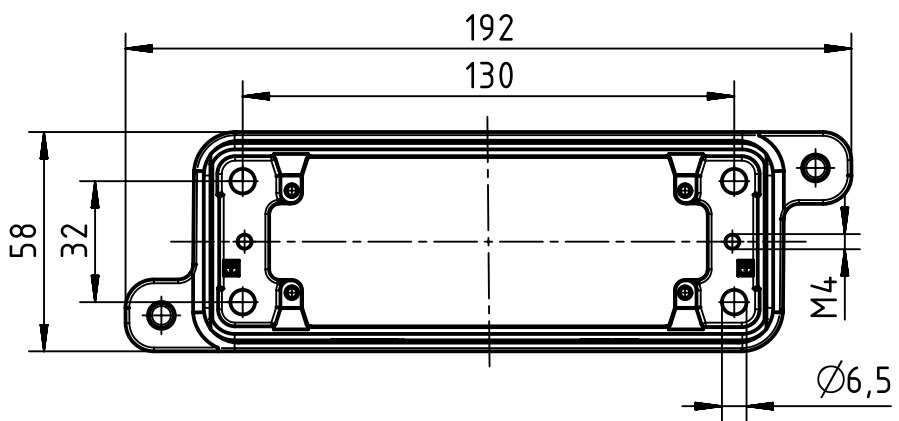
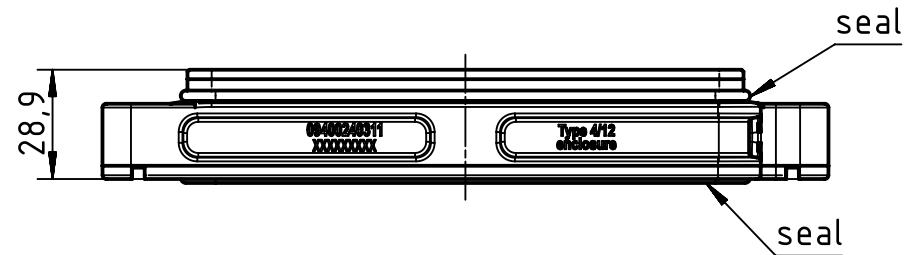
B

C

D



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	HARTING Electric GmbH & Co. KG D-32339 Espelkamp		Title Han-Modular Dummy Module				Doc-Key / ECM-Nr. 100220135/UGD/003/B 500000058661	
			Type TB	Number 09 14 000 9950			Page 1/1	



application	a
standard insert	35
HC-Modular 650	44,5

	All Dimensions in mm Original Size DIN A4		Scale 1:2	Free size tol.		Ref.	
	All rights reserved Department EL PD - DE		Created by FINKEV	Inspected by GERB	Standardisation TIEMANNA	Date 2015-11-13	State Final Release
HARTING Electric GmbH & Co. KG D-32339 Espelkamp		Title Han 24HPR Base Panel Screw locking				Doc-Key / ECM-Nr. 100217699/UGD/004/C 500000093625	
Type TB	Number 09 40 024 0311		Rev. C		Page 1/1		

TRENES ARGENTINOS OPERACIONES

DOCUMENTACIÓN TÉCNICA PARA COMPRA

NUM43360810380N

Descripción: Conector macho para cable conexión entre coche modelo XSP31, XSP33, XSP35, XSP37. CCEE CSR

Plano N°: No corresponde

Planos concatenados N°: No corresponde

Referencia de fábrica: No corresponde

Especificación

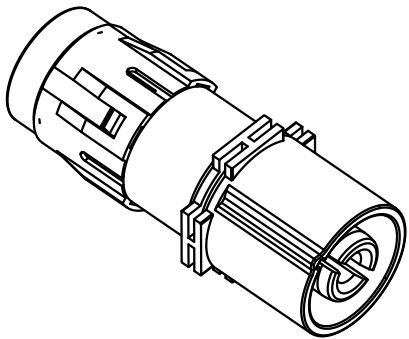
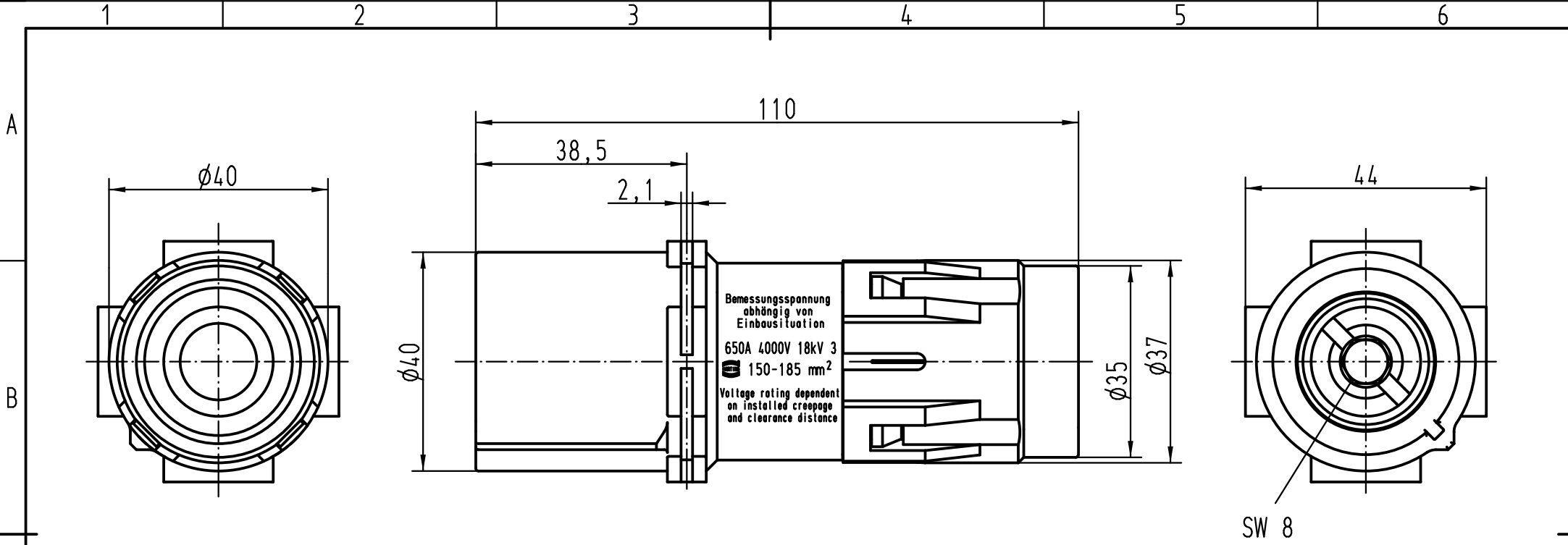
Conector macho, 1 polo, 650A, 4000V, sección 150-185mm², salida recta M40, compuesto por:
1 modulo macho 09 11 001 2672 (HARTING)
1 bastidor metálico 09 11 000 9971 (HARTING)
1 carcasa plástica 19 40 006 0418 (HARTING)

Técnica:

Norma de aplicación: No corresponde

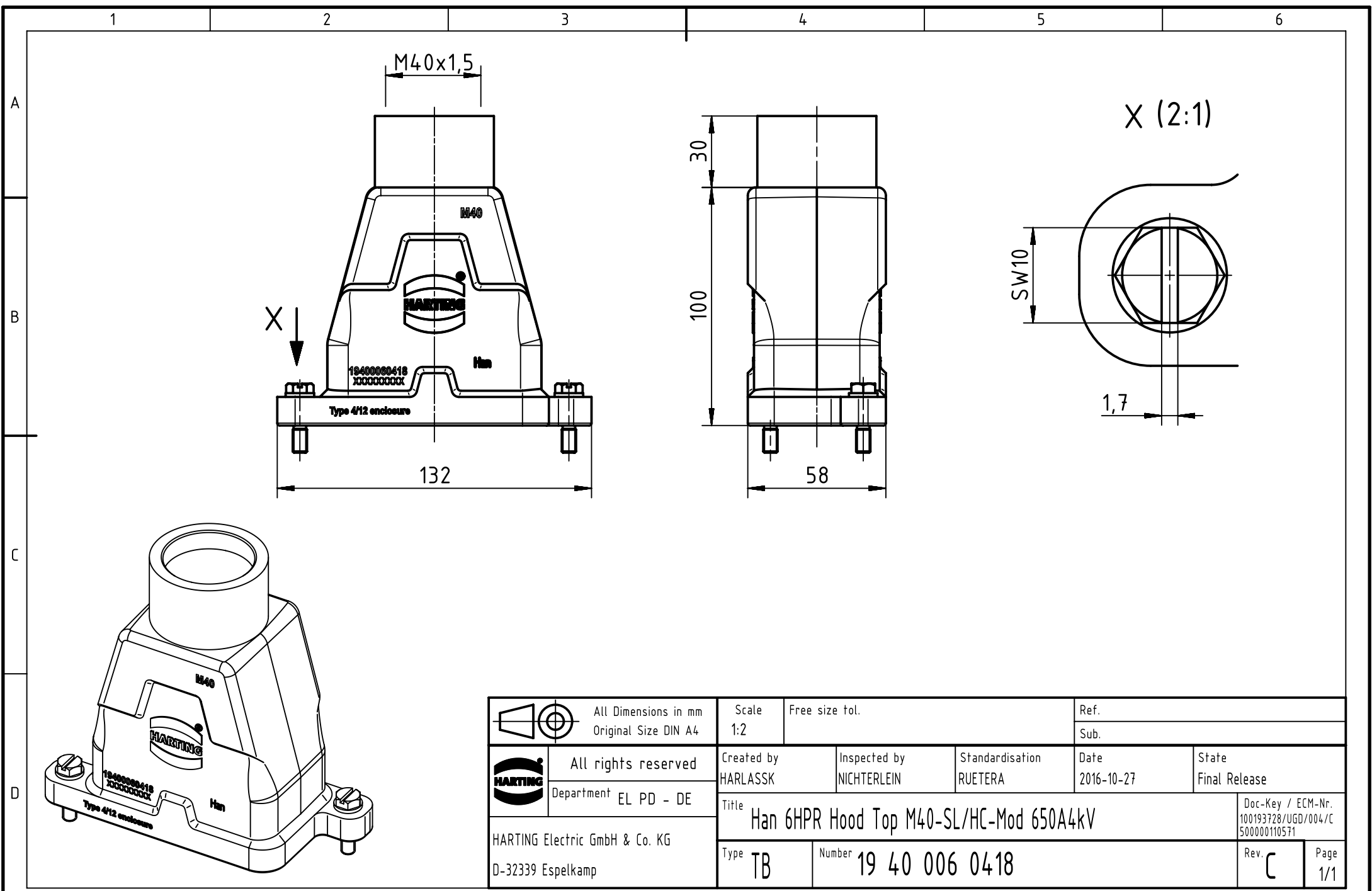
Función: Conexión eléctrica de los cables de entrecoche.

	ELABORÓ	REVISÓ	APROBÓ
NOMBRE	Ing. I. Milesi	Ing. H. Baigorria	Ing. C. Valdes Lazo
FIRMA	-	-	-

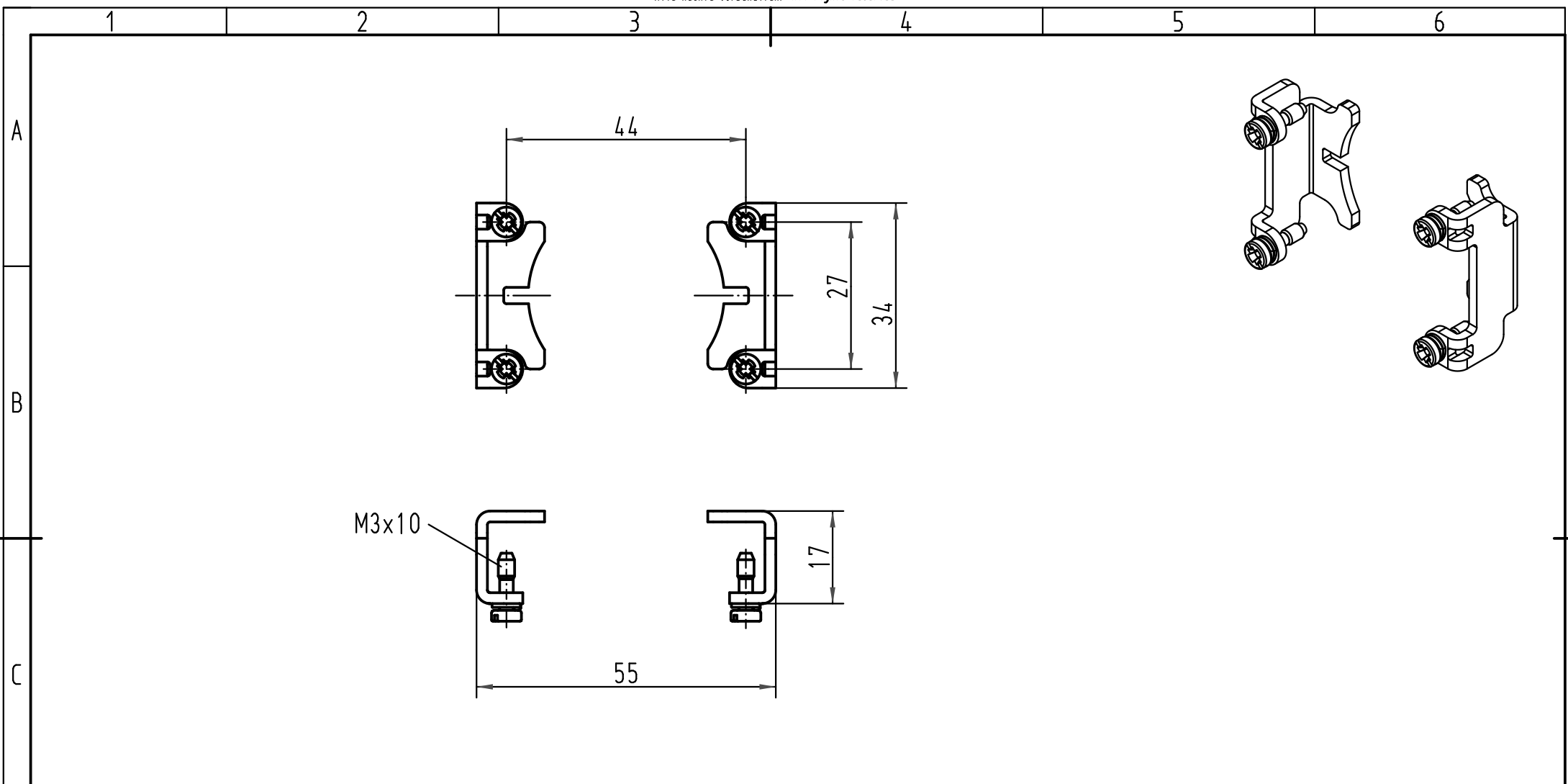


Leiterquerschnitt wire gauge	
150-185 mm ²	AWG 300-350 MCM

	All Dimensions in mm Original Size DIN A 4			Techn. Character.		Nicht tolerierte Maße/Free size tolerances	
				Dat.	Name		Maßstab/Scale 1:1
			Detail.	20.02.12	Rull	Han 1HC-sti-AX 650A Stiftträger, axialschraub <i>male insert, axial screw</i>	
			Insp.		Sch		
			Stand.				
			A		HARTING Electric GmbH & Co. KG D-32339 Espelkamp 	TB 09 11 001 2672 Blatt/page	
			Mod.	Dat.			Name



	All Dimensions in mm Original Size DIN A4		Scale 1:2	Free size tol.		Ref.	
						Sub.	
	All rights reserved		Created by HARLASSK	Inspected by NICHTERLEIN	Standardisation RUETERA	Date 2016-10-27	State Final Release
	Department EL PD - DE		Title Han 6HPR Hood Top M40-SL/HC-Mod 650A4kV			Doc-Key / ECM-Nr. 100193728/UGD/004/C 500000110571	
HARTING Electric GmbH & Co. KG D-32339 Espelkamp			Type TB	Number 19 40 006 0418		Rev. C	Page 1/1



All Dimensions in mm Original Size DIN A 4		Techn. Character.			Nicht tolerierte Maße/ Free size tolerances	
			Dat.	Name	Maßstab/ Scale 1:1	Han 1HC-Halterung 650A Han 1HC-Frame 650A
		Detail.	26.05.99	Gä		
		Insp.		OLE		
		Stand.				
413153	27.08.07	Bor	HARTING Electric GmbH & Co. KG			TB 09 11 000 9971
26109			D-32339 Espelkamp			
Mod.	Dat.	Name				Sub. Blatt/ page

TRENES ARGENTINOS OPERACIONES

DOCUMENTACIÓN TÉCNICA PARA COMPRA

NUM43360810390N

Descripción: Conector hembra para cable conexión entre coche modelo XSP32, XSP34, XSP36, XSP38. CCEE CSR

Plano N°: No corresponde

Planos concatenados N°: No corresponde

Referencia de fábrica: No corresponde

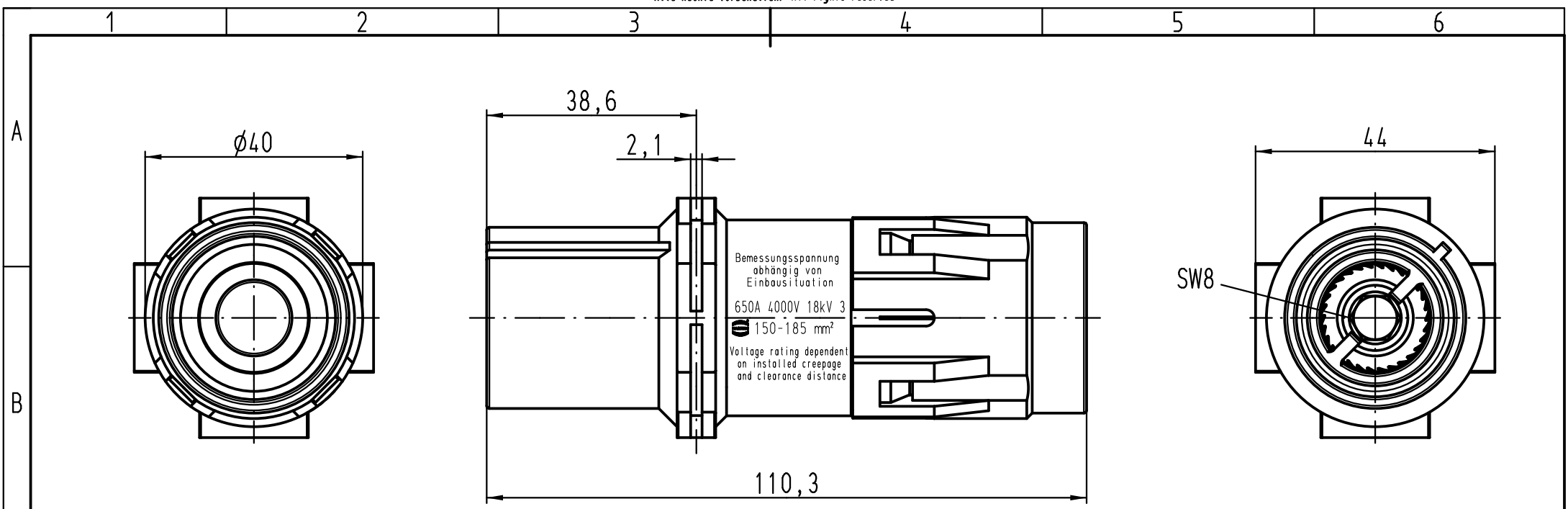
Especificación Técnica:

Conector hembra, 1 polo, 650A, 4000V,
sección 150-185mm², compuesto por:
1 modulo hembra 09 11 001 2772 (HARTING)
1 bastidor metálico 09 11 000 9971 (HARTING)
1 base plástica 09 40 006 0314 (HARTING)

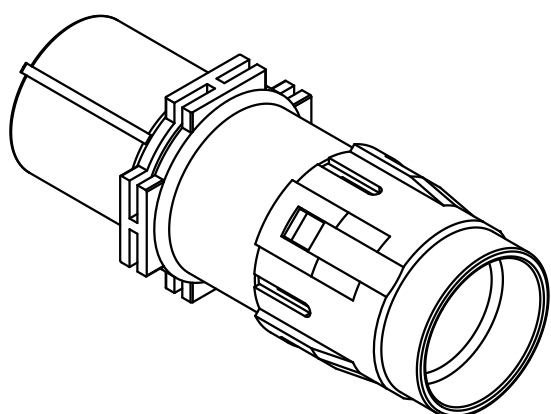
Norma de aplicación: No corresponde

Función: Conexión eléctrica de los cables de entrecoche.

	ELABORÓ	REVISÓ	APROBÓ
NOMBRE	Ing. I. Milesi	Ing. H. Baigorria	Ing. C. Valdes Lazo
FIRMA	-	-	-

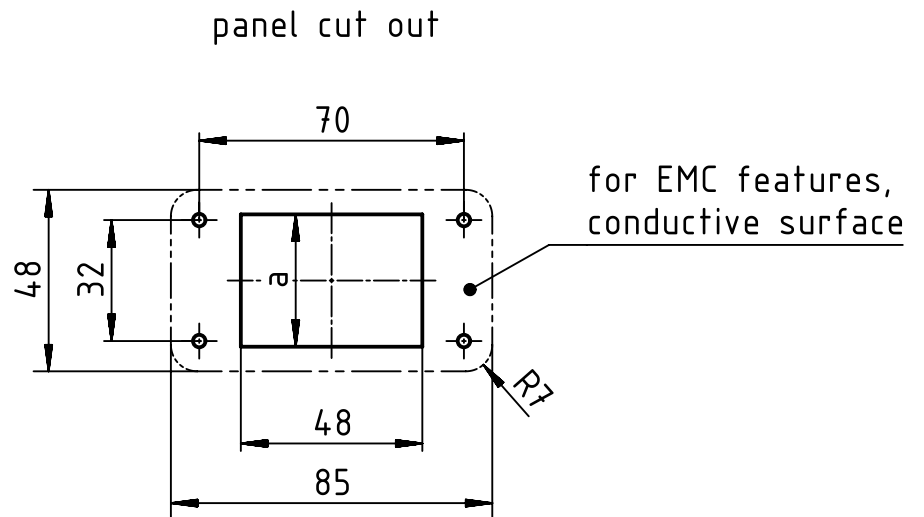
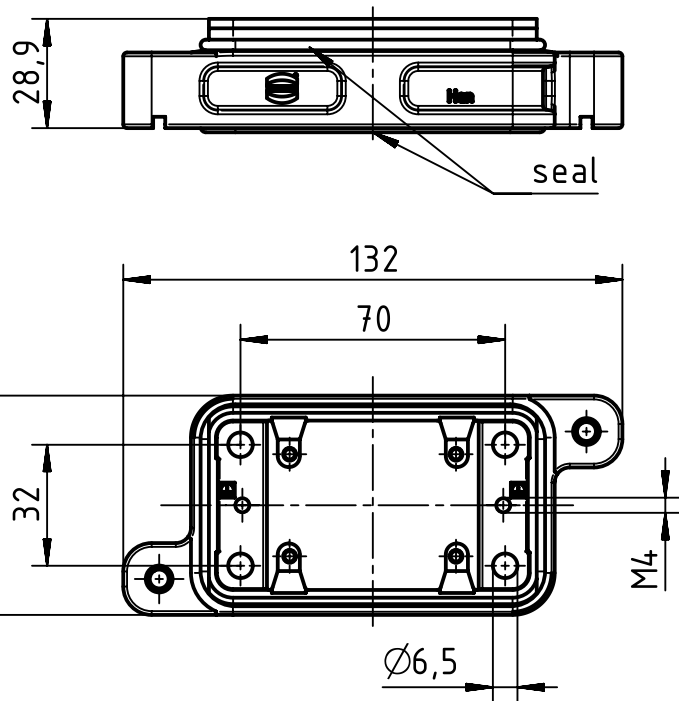


Bemessungsspannung
abhängig von
Einbausituation
650A 4000V 18kV 3
150-185 mm²
Voltage rating dependent
on installed creepage
and clearance distance

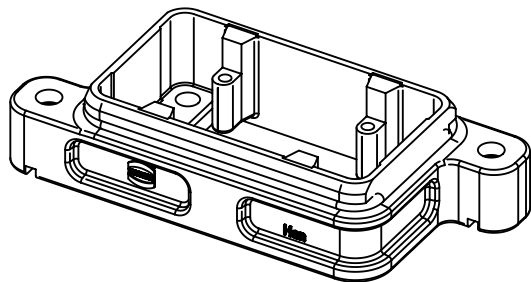





Leiterquerschnitt wire gauge	
150-185mm ²	AWG 300-350 MCM

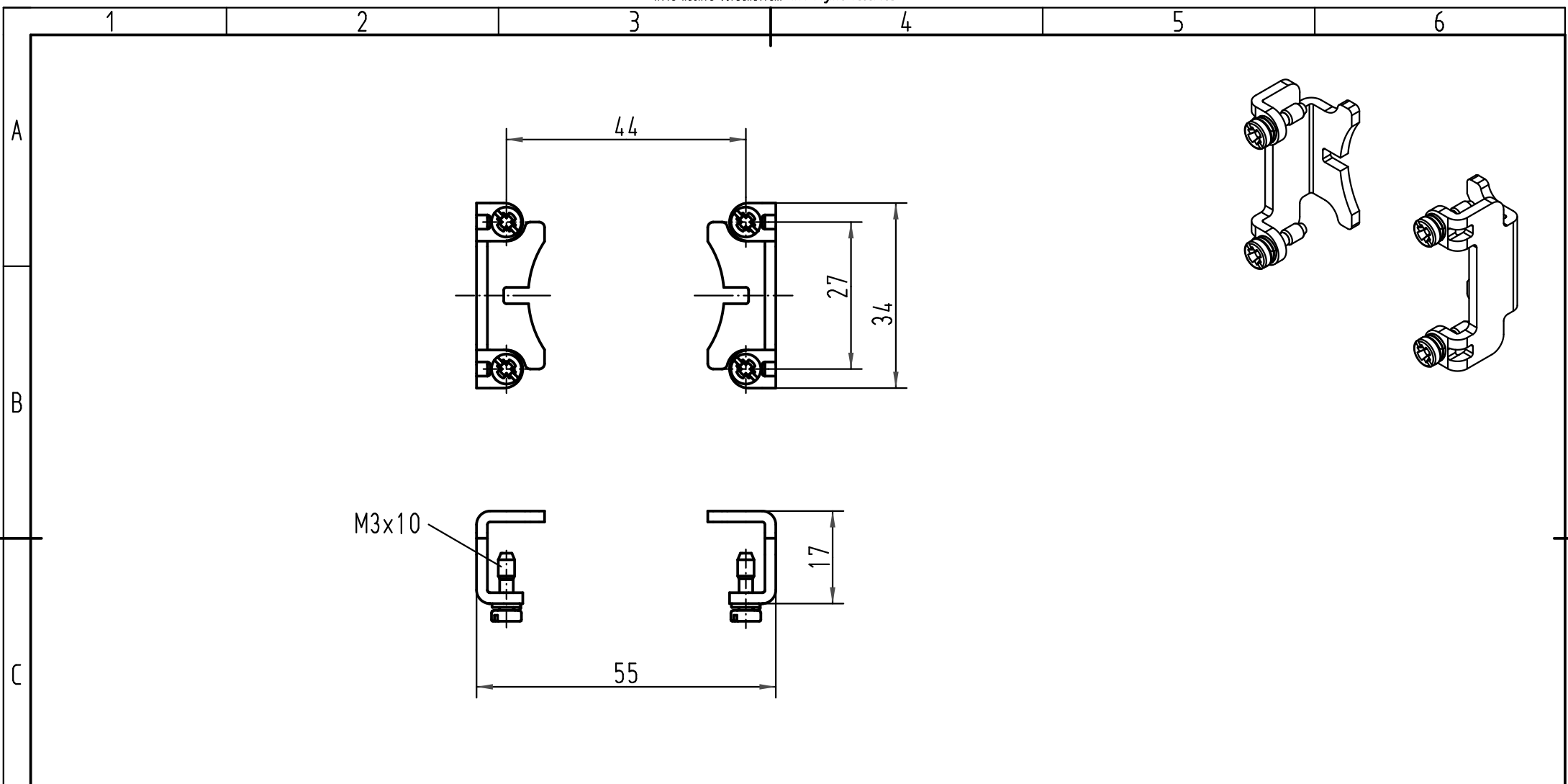
All Dimensions in mm Original Size DIN A 4	Techn. Character.			Maßstab/Scale 1:1	Nicht tolerierte Maße/Free size tolerances
	Detail.	Dat.	Name		
	Insp.		Sch		Han 1HC-bu-AX 650A Buchsenträger, axialschraub <i>female insert, axial screw</i>
	Stand.				
A	HARTING Electric GmbH & Co. KG				TB 09 11 001 2772
Mod.	D-32339 Espelkamp				
	Dat.	Name			Sub. TB 09 11 001 2772 v. 01.06.99



application	a
standard insert	35
HC-Modular 650	44,5



	 All Dimensions in mm Original Size DIN A4	Scale 1:2	Free size tol.		Ref.	
	 All rights reserved Department EL PD - DE	Created by PENNER	Inspected by BERGHORN	Standardisation TIEMANNA	Date 2014-04-17	State Final Release
HARTING Electric GmbH & Co. KG D-32339 Espelkamp		Title Han 6HPR BasePanel screwlock.for HC Modu			Doc-Key / ECM-Nr. 100209961/UGD/005/A 500000073859	
		Type TB	Number 09 40 006 0314		Rev. A	Page 1/1



All Dimensions in mm Original Size DIN A 4		Techn. Character.			Nicht tolerierte Maße/ Free size tolerances	
			Dat.	Name	Maßstab/ Scale 1:1	Han 1HC-Halterung 650A <i>Han 1HC-Frame 650A</i>
		Detail.	26.05.99	Gä		
		Insp.		OLE		
		Stand.				
413153	27.08.07	Bor	HARTING Electric GmbH & Co. KG			TB 09 11 000 9971
26109			D-32339 Espelkamp			
Mod.	Dat.	Name				Sub. Blatt/ page

TRENES ARGENTINOS OPERACIONES

DOCUMENTACIÓN TÉCNICA PARA COMPRA

NUM43360810460N

Descripción: Conector macho para cable conexión entre coche modelo XSP3Y. CCEE CSR

Plano N°: No corresponde

Planos concatenados N°: No corresponde

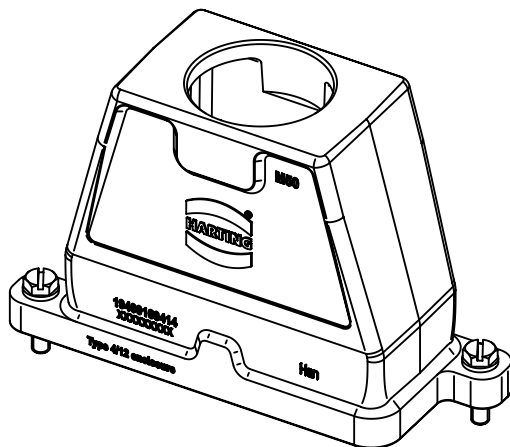
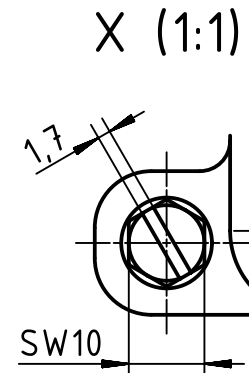
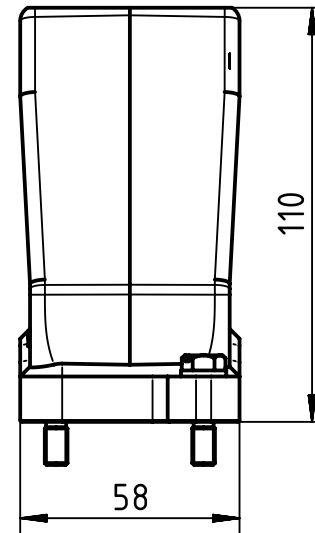
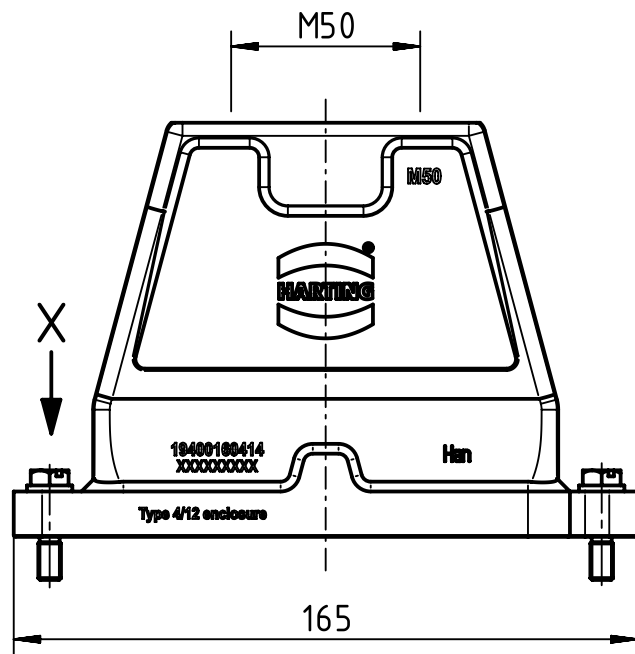
Referencia de fábrica: No corresponde

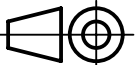

Especificación Técnica: Conector macho, 2 polos, 200A, 1000V, salida recta M50, seccion 40-70mm². Compuesto por:
2 Modulo macho 09 14 001 2662 (HARTING)
1 Bastidor metalico 09 14 016 0303 (HARTING)
1 carcasa plastica 19 40 016 0414 (HARTING)

Norma de aplicación: No corresponde

Función: Conexión eléctrica de los cables de entrecoche.

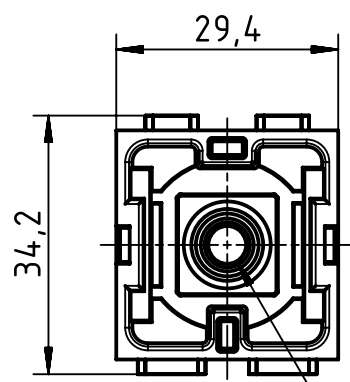
	ELABORÓ	REVISÓ	APROBÓ
NOMBRE	Ing. I. Milesi	Ing. H. Baigorria	Ing. C. Valdes Lazo
FIRMA	-	-	-



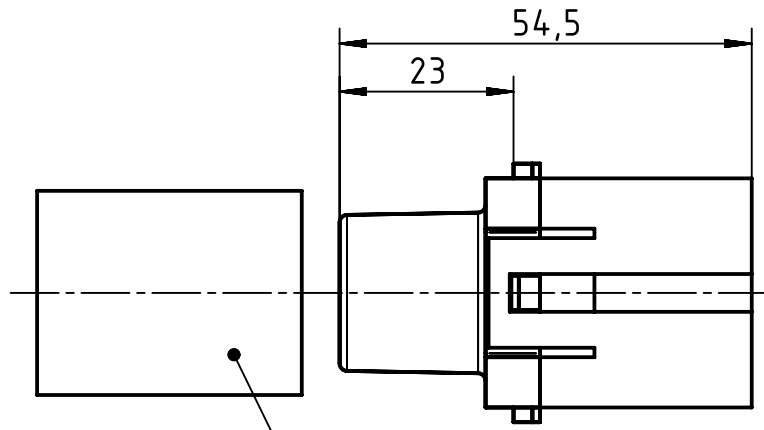
 All Dimensions in mm Original Size DIN A4	Scale	Free size tol.			Ref.
	1:2				Sub.
 All rights reserved Department EL PD - DE	Created by	Inspected by	Standardisation	Date	State
	HELLMANN	BERGHORN	RUETERA	2017-01-24	Final Release
HARTING Electric GmbH & Co. KG D-32339 Espelkamp	Title				Doc-Key / ECM-Nr.
	Han 16HPR Hood Top Entry M50 screw lock				100170344/UGD/004/B 500000113863
Type	Number	Rev.		Page	
TB	19 40 016 0414	B		1/1	

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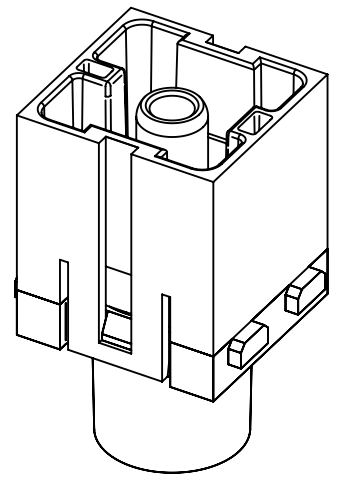
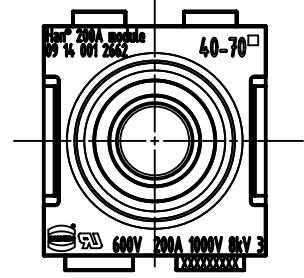
A
B
C
D



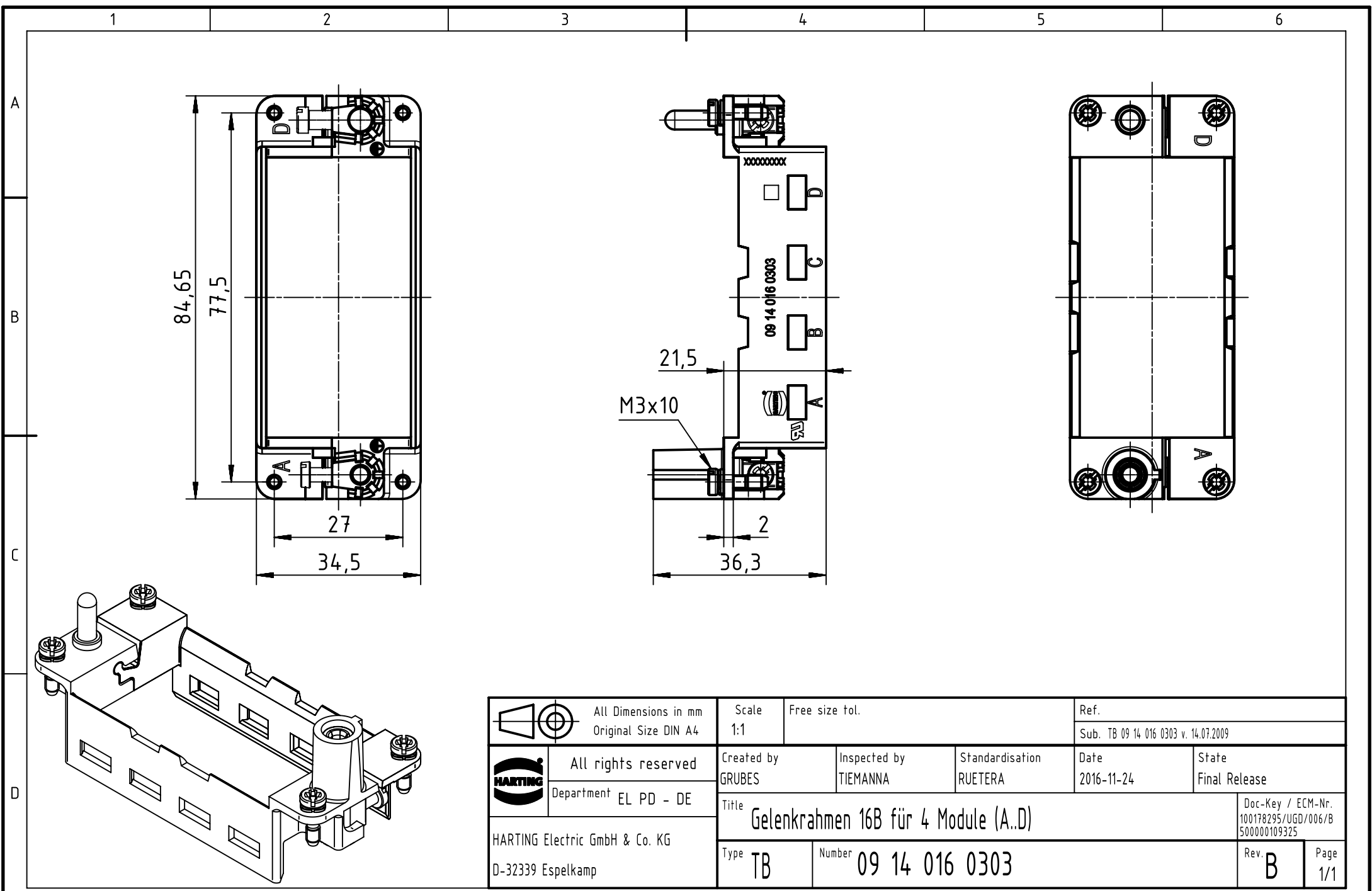
SW5



heat shrink tube



	All Dimensions in mm Original Size DIN A4	Scale 1:1			Free size tol.		Ref.	
						Sub.		
	All rights reserved Department EL PD - DE	Created by	Inspected by	Standardisation	Date	State		
		RULLKOETTER	SCHNIEDER	TIEMANNA	2014-06-11	Final Release		
HARTING Electric GmbH & Co. KG D-32339 Espelkamp		Title Han 200A axial module, male 40-70 mm ²				Doc-Key / ECM-Nr. 100086411/UGD/008/A 500000074632		
		Type	Number		Rev.	Page		
		TB	09 14 001 2662		A	1/1		



	All rights reserved Department EL PD - DE	All Dimensions in mm Original Size DIN A4		Scale 1:1	Free size tol.	Ref. Sub. TB 09 14 016 0303 v. 14.07.2009	
		HARTING Electric GmbH & Co. KG D-32339 Espelkamp	Created by GRUBES	Inspected by TIEMANNA	Standardisation RUETERA	Date 2016-11-24	State Final Release
Title Gelenkrahmen 16B für 4 Module (A..D)						Rev. B	Page 1/1
				Type TB	Number 09 14 016 0303		

TRENES ARGENTINOS OPERACIONES

DOCUMENTACIÓN TÉCNICA PARA COMPRA

NUM43360810470N

Descripción: Conector hembra para cable conexión entre coche modelo XSP3X. CCEE CSR

Plano N°: No corresponde

Planos concatenados N°: No corresponde

Referencia de fábrica: No corresponde

Especificación Técnica: Conector hembra 2 polos, 200A, 1000V, sección 40-70mm², compuesto por:
2 Modulo hembra 09 14 001 2762 (HARTING),
1 Bastidor metálico 09 14 016 0313 (HARTING),
1 base plástica 09 40 016 0311 (HARTING)

Norma de aplicación: No corresponde

Función: Conexión eléctrica de los cables de entrecoche.

	ELABORÓ	REVISÓ	APROBÓ
NOMBRE	Ing. I. Milesi	Ing. H. Baigorria	Ing. C. Valdes Lazo
FIRMA	-	-	-

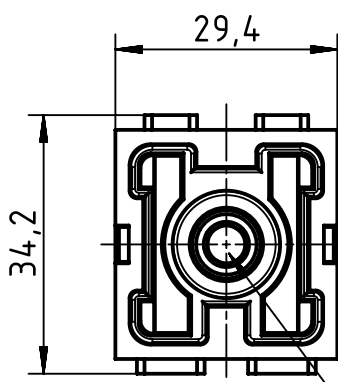
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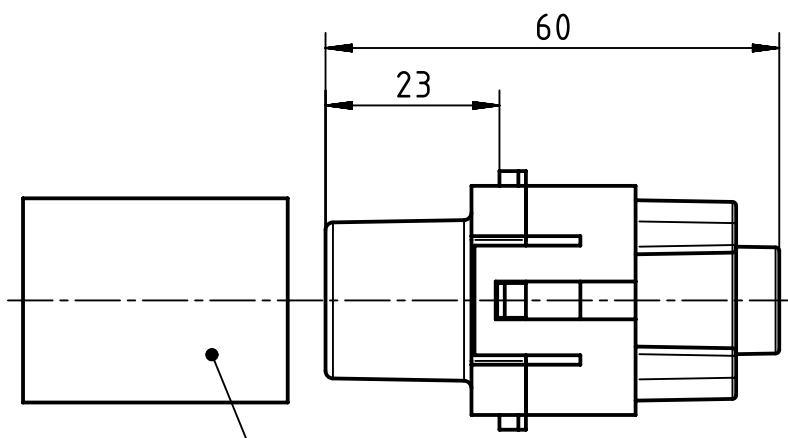
B

C

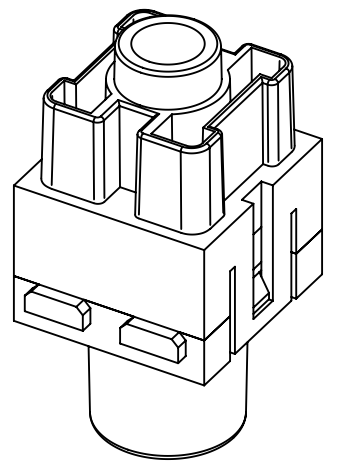
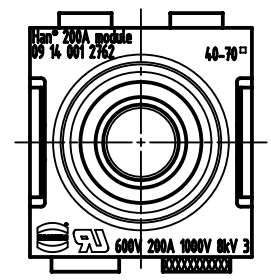
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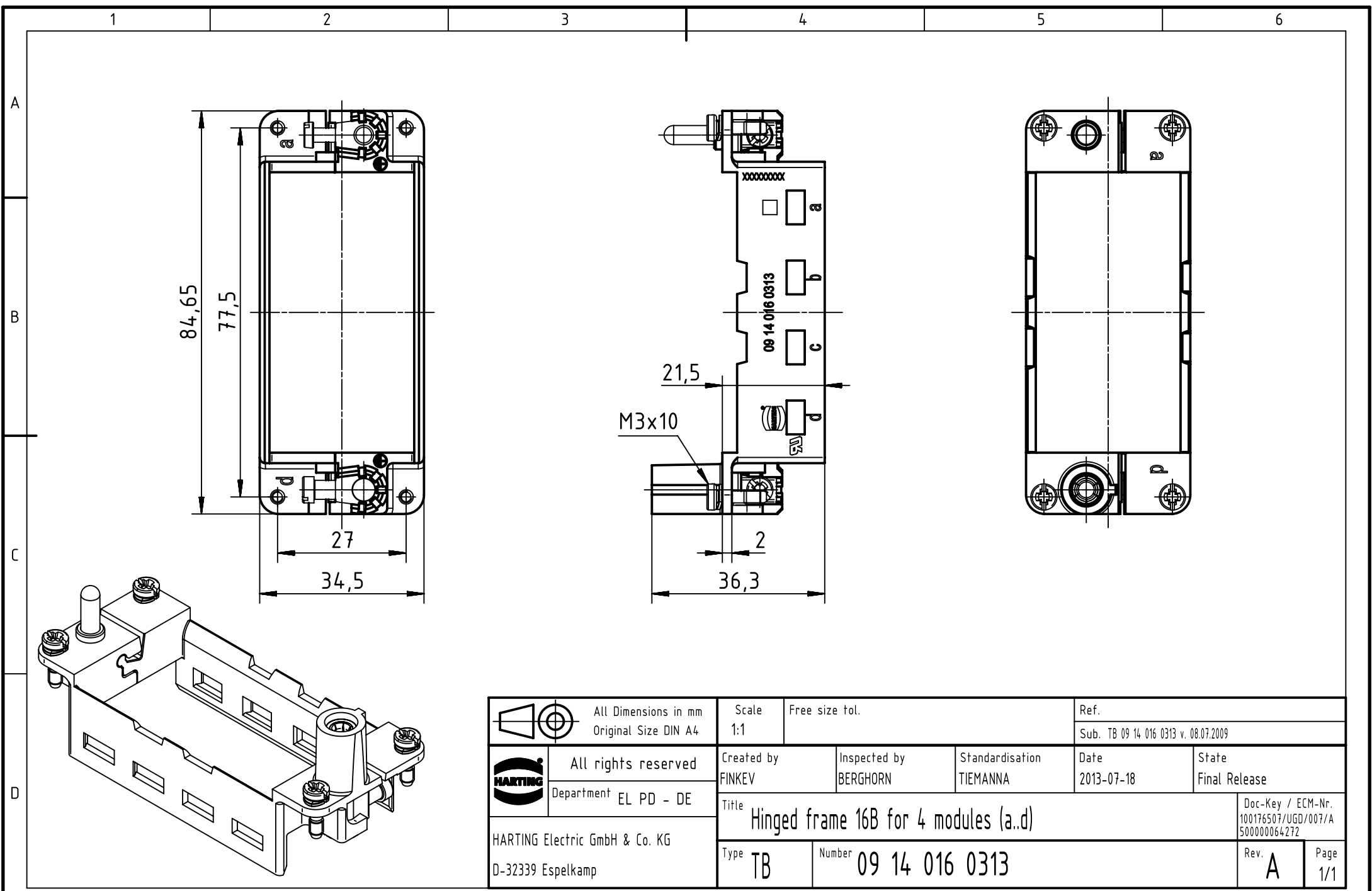
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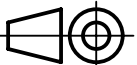



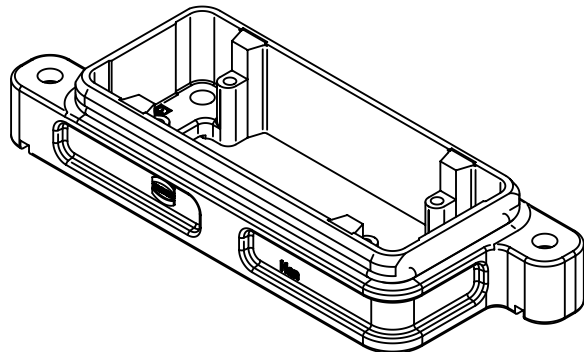
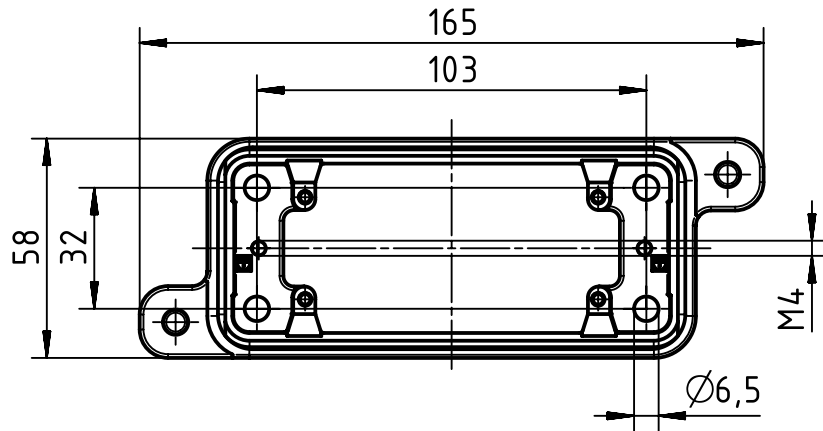
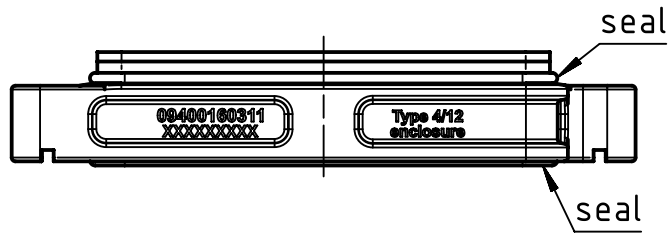
heat shrink tube



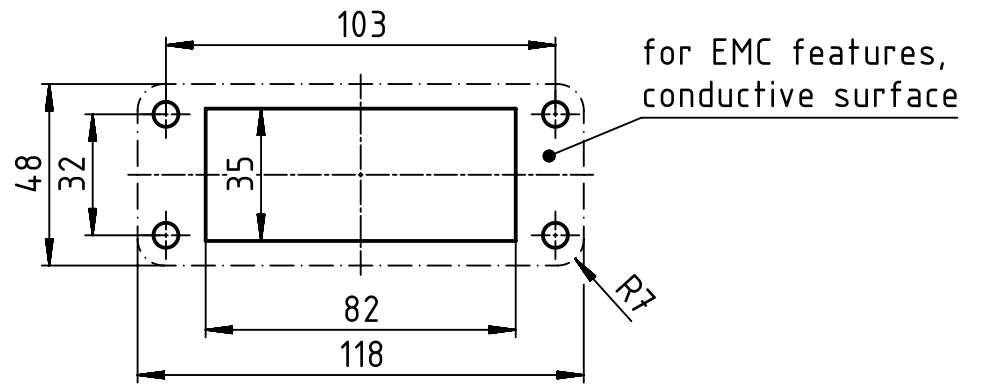
	All Dimensions in mm Original Size DIN A4		Scale 1:1	Free size tol.		Ref.
	All rights reserved Department EL PD - DE		Created by RULLKOETTER	Inspected by BERGHORN	Standardisation TIEMANNA	Date 2015-08-26
HARTING Electric GmbH & Co. KG D-32339 Espelkamp			Title Han 200A axial module, female 40-70 mm ²			Doc-Key / ECM-Nr. 100097906/UGD/008/C 500000093653
			Type TB	Number 09 14 001 2762		Rev. C Page 1/1



	All Dimensions in mm Original Size DIN A4		Scale 1:1	Free size tol.		Ref. Sub. TB 09 14 016 0313 v. 08.07.2009		
		All rights reserved Department EL PD - DE		Created by FINKEV	Inspected by BERGHORN	Standardisation TIEMANNA	Date 2013-07-18	State Final Release
HARTING Electric GmbH & Co. KG D-32339 Espelkamp						Doc-Key / ECM-Nr. 100176507/UGD/007/A 500000064272		
				Type TB	Number 09 14 016 0313		Rev. A	Page 1/1



panel cut out



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		Created by RULLKOETTER	Inspected by GERB	Standardisation TIEMANNA	Date 2015-09-03	State Final Release
Title Han 16HPR Base Panel Screw Locking					Doc-Key / ECM-Nr. 100209307/UGD/004/B 500000093926	
Type TB			Number 09 40 016 0311		Rev. B	Page 1/1