



FOSTAC MAXIMUS®

M100W/TN-S

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1. installation diagram: FOSTAC MAXIMUS®

Type - M100W:

The FOSTAC-MAXIMUS®

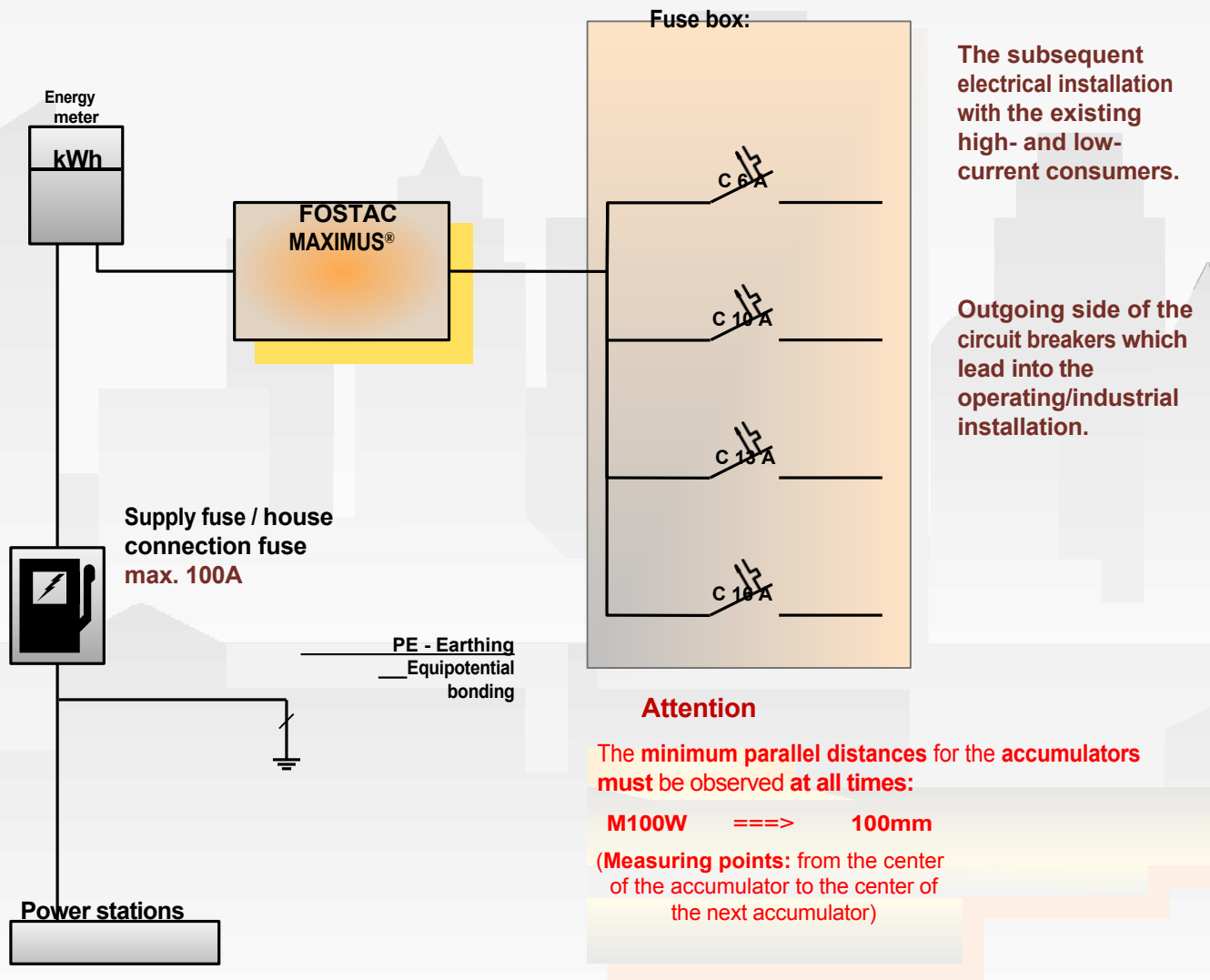
- is installed in series after the energy meter in the supply line

- The cable cross-section to be connected depends on the respective consumer or connection fuse

- must be connected to the protective earth conductor (PE) of the downstream electrical installation. (potential equalization)

Principle example:

Main distribution/
Sub-distribution in small to medium-sized companies and/or industry.



2. circuit diagram

			Date	29.05.2008		Circuit diagram 1. general title page	Type	M100W/TN-S	Leaf	001
			Edited.	R.K.			:			
			Gepr.	<i>P. Kra</i>						
Amendment	Date	Name	Standard	EN 60439-1			FOSTAC MAXIMUS®	Consequen	002	

Table of contents:

1. general:

Sheet 001 Title page (company & product) Table of
 Sheet 002 contents

2nd scheme:

Sheet 010 Supply / input terminals Main circuit / output
 Sheet 011 terminals

Electrical wiring:

vein:

Wire colors:

Color:

All circuits:

Earth conductor, protective conductor PE yellow/green

Main circuit = 230VAC:

Polleiter	L1	brown
Polleiter	L2	black
Polleiter	L3	gray
Neutral conductor	N	light blue

Control circuit = 50VAC:

Polleiter	L	red
Neutral conductor	N	light blue

Control circuit 24VDC:

24VDC	+	violet dark
0VDC	-	blue

Equipment labeling:

Type of equipment:

Code letter:

Converters, power supply units, frequency	G
converters Terminals	X

Date 29.05.2008

Edited. R.K.

Circuit diagram

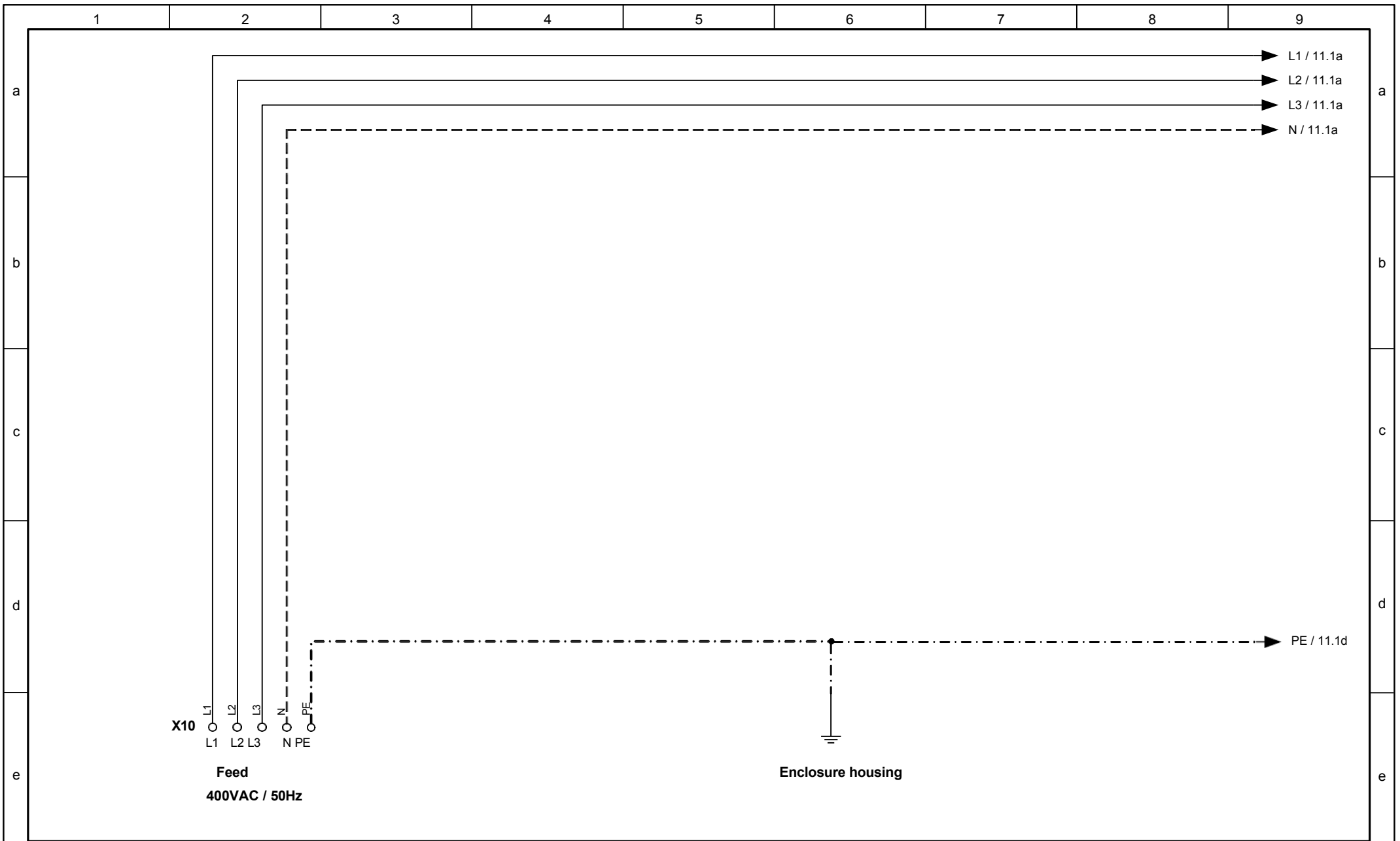
Type
:



M100W/TN-S

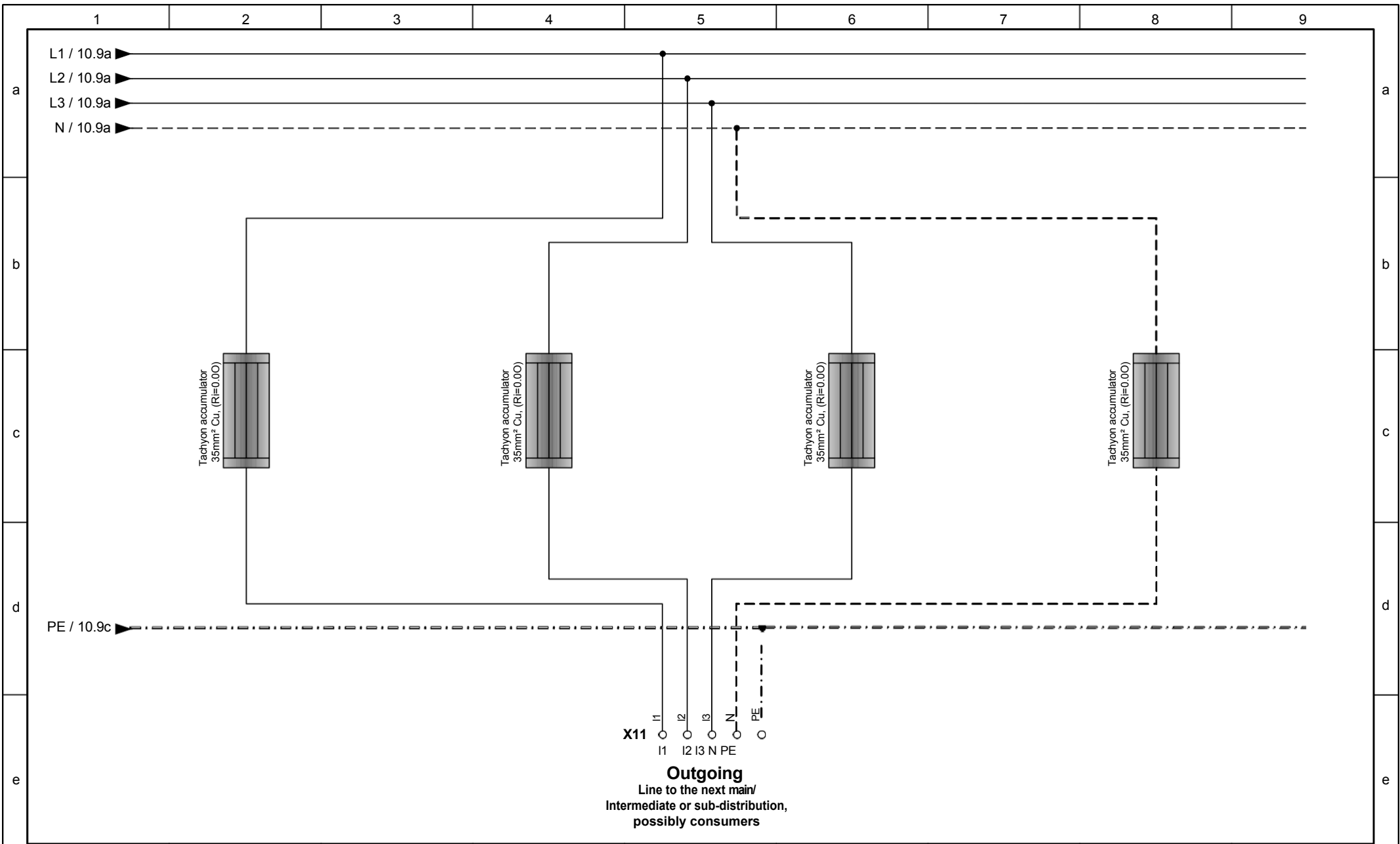
Leaf

002


			Gepr.	<i>P. Van</i>		1. general table of contents		Consequence	010
Amendment	Date	Name	Standard	EN 60439-1					



		Date	29.05.2008			Circuit diagram 2. main flow diagram	Type:	M100W/TN-S	Sheet	010
		Edited	R.K.					Episode 011		
Amendm ent	Date	Name	ard					EN 60439-1		



Outgoing
 Line to the next main/
 Intermediate or sub-distribution,
 possibly consumers

		Date	29.05.2008		Circuit diagram 2. Scheme main stream	Typ	M100W/TN-S	Sheet	011
		Edited	R.K.			e:	FOSTAC MAXIMUS®	result	-
Amendm ent	Date	Name	ard			EN 60439-1			

3. Assembly and installation

instructions FOSTAC MAXIMUS® Type -

M100W

Dear plumber

Read all the documents supplied carefully before installing the device. These instructions for the assembly and installation of switchgear and controlgear assemblies are intended to make the electrical installer aware of how the system should be assembled and connected in accordance with the new standards. It is the responsibility of the electrical installer to ensure strict compliance with the instructions given here.

The device may therefore only be installed by a legally recognized and licensed electrician.

Due to various regulations, not every location is suitable for this type of installation. The licensed specialist may therefore impose restrictions on the installation location requested by the customer. Otherwise, the installation location may be freely chosen by the customer.

Installation & connection

In addition to EN 60439-1:1999+A1:2004, the locally applicable regulations (factory regulations, EW regulations) must also be observed when connecting and commissioning the system. The following points must also be observed:

- The device must be connected in series to the supply/load line of the existing installation in accordance with the enclosed installation diagram after counting the electrical current (according to meter current transformers).
- It should be noted that the possible short-circuit currents at the connection point of the FOSTAC MAXIMUS® cannot be higher than those declared on the manufacturer's rating plate.
- To ensure the escape route, there must still be a minimum passage of 500 mm when the door is open.
- The M100W is an IP66 ingress protection class device and is therefore dustproof and can withstand temporary flooding (but not temporary submersion).
- The M100W must be connected with a five-pole cable each for the input and output lines.
- The conductor cross-sections to be selected for the M100W must correspond to the connected load of the nearest back-up fuse (e.g. CH - see "NIN 2000").
- For space reasons, it is not advisable to oversize the connection cables.
- There are two cable glands in the housing design for the input and output cables, which can be fitted either at the top or bottom. The remaining two feed-through holes must be fitted with blanking plugs.
- It must be ensured that even after connecting the FOSTAC MAXIMUS® the ingress protection is guaranteed in accordance with the specifications.

- The connection side of the cables to the accumulators is at the discretion of the installer.
- The connection terminals of the protective earth conductor (PE) should be repositioned on the profile rails provided for this purpose, as required. This makes it easier to connect the conductor.
- If contact between the conductor and any cut edges cannot be completely avoided in confined spaces, the edges must be protected with protective profiles. Contact of the cables with pressure should be avoided at all costs.
- All screws of the connection terminals must be tightened to the required strength, which prevents the screws from loosening themselves.
- The minimum distances between the accumulators must not be less than the prescribed 100 mm and must be observed.
- Correct fastening and strain relief of the cables must be ensured. Suitable materials must be used to fasten the conductors that are strong enough to absorb not only the normal vibrations during operation, but also the forces of a short circuit.
- Protective covers must be reattached in the designated position after connection.
- The screws of the contact protection covers must be fixed in such a way that they cannot be opened without tools.
- After installing the FOSTAC MAXIMUS®, it is essential that the door and any covers on the housing are closed or refitted.

- **The routine test report contained in the cabinet is used for checking the appliance and must be removed after installation of the appliance and attached to the installation documents. No documents may be stored inside the cabinet.**
- **The FOSTAC MAXIMUS investment documents® must be placed in a clearly visible position near the property.**

Important:

- Modifications to the type-tested system (PTSK or TSK) may only be carried out by the manufacturer.
- If the installer himself makes changes to the design or wiring or subsequently installs additional devices, important safety regulations may be violated as a result. The installer therefore assumes full liability for any changes to the system and must carry out and document any recalculations / retests of the system that may be necessary as a result of the change. The manufacturer's documentation becomes invalid with any modification.

Zeüifikat

Test confirmation for verification in accordance with NEV/VEMV and EU/EEA

CERTIFEL

Certificate Ref.No. **CH-08-IK-0026.ZA1.A**

Page 1 of 2

Product	Switchgear combination (PTSK/TSK)	
Client	Fostac AG, Dorfstrasse 28, CH-9248 Bichwil	
Manufacturer	Fostac Technologies AG, Poststrasse 16, CH-9243 Jonschwil	
Production facility	Fostac Technologies AG, Poststrasse 16, CH-9243 Jonschwil FOSTAC MAXIMUS	
Trademark (trademark)	FOSTAC MAXIMUS M...	see page 2
Type/model	Ue: 230/400V-, 400/690V-, Ie: 100 - 1250A; IP40/54/ü6,	see page 2
Nominal data		
Additional information	EN 60439-1:99 + A1:04	
Safety engineering standards		
Standards		
EMC Other standards		

The product has been tested in accordance with the normative documents listed above. It can be assumed that proof has been provided that the product meets the requirements of the Swiss authorities (NEV/VEMV) and the European directives (EU/EEA).

The test results are recorded in the following report numbers: 08-IK-0026.01

**Electrosuisse
National Certification Body**



Martin Plüss Certification
Products

A blue ink handwritten signature, likely belonging to Martin Plüss, is placed over a light blue rectangular background.

SEV Association for Electrical, Energy and Information
Technology
SEV Association pour l'électrotechnique, les
technologies de l'énergie et de l'information SEV
Associazione per l'elettrotecnica, la tecnica energetica
e l'informatica

Fehraltorf, 3. 03.2008

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Supplement to the certificate

CERTIFEL

Certificate Ref. No. CH-0&IK-0026.ZA1.A

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Type overview and rated data:

Typenbezeichnung:	Unit	M100W	M10M	M103W	M200W	M200	UZSOW	UZS
Masse H/B/T Wandmontage	mm	600x500 x155	600x500 x155	600x500 x210	950x800 x275		950x800 x275	
Masse H/B/T Boden Aufstellung	mm					1150x800 x275		1150x800 x275
Gewicht	kg	22	22	23	53	62	55	64
Protection	IP	" 66	" 66	" 66	" 66	" 54	" 54	" 54
Akkumulatoren pro Phase / N	Quantity	1	1	1	1	1	1	
Akku. Typ	A	100	100	100	200	200	250	250
Verlustleistung je Akkumulator	W	2.1	2.1	2.1	2.8	2.8	3.2	
Mku. Total power supply (3ph)	W	6.3	6.3	6.3	8.4	8.4	9.6	9.6
Akku. Anschluss auf Reihenklemme		x	x	X	X	x	X	x
Akku. Anschluss auf Cu Schiene								
Akku. Rundkupfer Querschnitt	mm ²	38d.	38.4	38.4	113	113	153	153
Bemessungsbetriebsspannung:	V	400/600	400/600	400/690	400/600	400/600	400/690	400/690
Bemessungsisolationsspannung:	V	690	690	600	890	690	690	690
Bemessungsstossspannungsfestigkeit:								
Bemessungsstrom :	A	100	100	100	200	200	250	250
Backup Schutz::	A	100	100	100	200	200	250	250
Bemessungskurzzeitstromfestigkeit:	kA/1s	-			15	15	15	15
Bemessungsstossstromfestigkeit:	kA/gk	-			30	30	30	30
Bedingte Kurzschlussfestigkeit Icf	kA/IcApk	10/17	CO/17	10/17				

Typenbezeichnung:	Unit	M400W	M400	M403	M503	M800	M1000	M1250
Masse H/B/T Wandmontage	mm	1400x1050 x275						
Masse H/B/T floor installation	mm		1600x1050 x275	2000x1050 x400	2000x1050 x400	2200x1150 x400	2200x1150 x400	2200x1150 x400
Gewicht	kg	95	105	130	134	155	165	180
Protection	IP	"54	"54	40	40	40	40	40
Accumulators per phase / N	Recommendation	2	2	2	2	4	4	5
Akku. Typ	A	200	200	200	250	200	250	250
Verlustleistung je Akkumulator	W	2.8	2.8	2.8	3.2	2.8	3.2	3.2
Akku. Verlustleistung total (3ph)	W	16.8	16.8	c.a	read	33.6	39.4	48
Akku. Anschluss auf Reihenklemme								
Akku. Anschluss auf Cu Schiene		X	X	X	X	X	X	X
Akku. Round copper Querschnitt	mm ²	113	113	113	153	113	153	153
Bemessungsbetriebsspannung:	V	230/400	230/400	400/690	400/690	400/690	400/690	400/690
Bemessungsisolationsspannung:	V	690	600	650	600	690	690	690
Bemessungsstossspannungsfestigkeit:	kV	6	6	6	6	6	6	6
Bemessungsstrom :	A	400	400	400	500	800	1000	1250
Backup Schutz::	A	400	400	400	500	800	1000	1250
Bemessungskurzzeitstromfestigkeit:	kA/1s							
Dimensioning time:	kA/IcApk	63	63	63	B3	105	105	105

* IP54/66 only with professional cable entry using suitable cable glands. Interior: IP20

Martin Plüss
Certification Products



Fehraltorf, 3. 03.2008



Declaration of conformity Déclaration de conformité

We
We
Nous

FOSTAC Technologies AG
Poststrasse 16
CH-9243 Jonschwil

declare under our sole responsibility that the product
declare under our sole responsibility that the product
déclarons sous notre seule responsabilité que le produit

FOSTAC MAXIMUS® **TypeM100W M102W M103W M200W M250W M400W**
M200 M250 M400 M403 M503
M800 M1000 M1250

to which this declaration refers complies with the following standard.
to which this declaration relates is in conformity with the following standard or other normative document.
auquel se réfère cette déclaration est conforme à la norme ou autre document normatif.

Low voltage - Switchgear and controlgear assemblies. Part 1: Type-tested and partially type-tested combinations

Low-voltage switch gear and control gear assemblies. Part 1: Type-tested and partially type-tested assemblies
Ensembles d'appareillage à basse tension Partie 1: Ensembles de série et ensembles dérivés de

EN 60439-1:1999+A1:2004

In accordance with the provisions of Directive 2006/95/EC of the European Parliament and of the Council of December 12, 2006.

following the provisions of Directive 2006/95/EC of the European Parliament and of the Council of 12 dec. 2006.
conformément aux dispositions de Directive 2006/95/CE du Parlement européen et du Conseil du 12 déc. 2006.

CH-9243 Jonschwil (SG)
Tuesday, February 26, 2008

FOSTAC Technologies AG


Hans Seelhofer
Technical Manager