Interface Module Adapter

6EZ2 for SIMATIC S7-300 und SIMATIC S7-400

Short Description March 2007

Innovation on economical base

When we are talking to our customers there always seems to be a common problem: many plants are still operating with automation systems of the previous generation and although the performance is still sufficient, it will become increasingly difficult to get spare parts and to have an efficient service in the future.

To be up to date, it will be necessary to replace the existing system with a modern unit.
But quite often this decision is delayed by the fear of disruption of the running production and the inconvenience of long-term trouble shooting in case of miswiring**.**
**But that could be avoided**!

1   Application

Retrofit at ease

Siemens engineers have developed an elegant method to solve your problem:
- in a very short time
- without errors
- on a low cost level

The Interface Module Adapter for SIMATIC S7-300 or SIMATIC S7-400 links the old with the new, field proven production systems with the latest achievements in automation systems.

You simply take off the front plug of the I/O units, replace the automation system by a S7, plug in the IMA and fix the front plug back on to the adapter. You see, all is done easily by plugins. And after installation of the STEP 7 software you can continue with you production.

S5

S7 400

Adapter
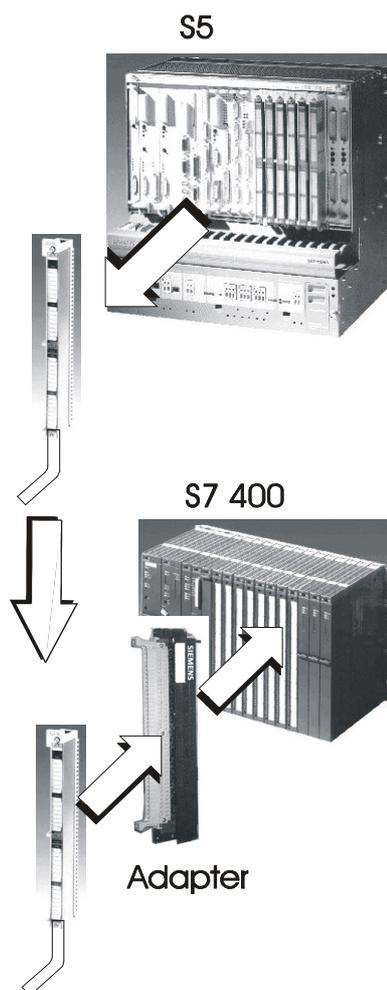
Advantages are obvious

- There are low engineering costs in the hardware. Only a replacement of the controller is necessary. All wiring remains at its place.
- Schematic diagrams don't have to be revised; signal lists are automatically updated by the software.
- The shutdown time of the production is reduced.

This procedure not only saves you a lot of time and money, but also reduces errors.

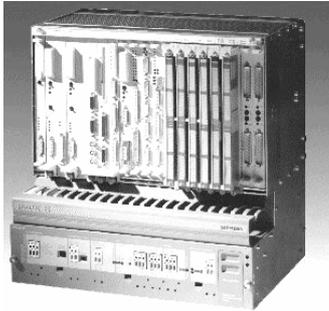Please contact on any technical or commercial questions

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RD SDW STG A&D B31
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2   Modul Types

Types of controllers

The use of IMA is intended for the following controllers:

- S5 115 U
- S5 130 W/K
- S5 135 U
- S5 150 U
- S5 155 S/U
- S5 150 K

As substitution appliance the S7-300 or S7-400 controller is used.

Digital Inputs

The digital inputs are classified by the following technical features:
- Number of channels: 8/16/32
- Potential separation: internal / external
- Grouping of channels: 1/4/8/16/32
- Signal voltage: TTL/24=/60=/115~/230~
- Switching frequency
- Type of connector: Screw/Crimp 42/20-poles
- Space requirement: single / double space
- Interrupt signal
- Enable signal
- Unit encoding
- Address encoding

All these specifications must be taken into consideration before the exchange.
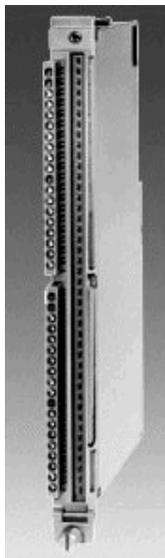
Digital Outputs

The digital outputs are classified by the following technical features:
- Number of channels: 8/16/32
- Potential separation: internal / external
- Grouping of channels: 1/4/8/16/32
- Signal voltage: TTL/24=/60=/115~/230~
- Switching frequency
- Type of connector: Screw/Crimp 42/20-poles
- Space requirement: single / double space
- Short circuit protection: none / fuse / electronic
- Switching Capacity: 0,1/0,5/2A
- Voltage limitation
- Unit encoding
- Address encoding

All these specifications must be taken into consideration before the exchange.

3   Adapter Layout

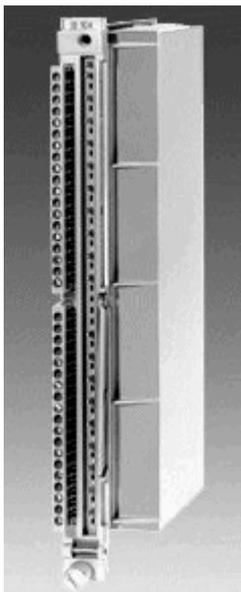## 3.1   View S7-300

For S7-300 Rack

Front Connector S7-300

Connecting Cable

Connector for S5 Front Connector

Case with Printed Circuit Board

3.2   View S7-400

Front Connector S7-400

Printed Circuit Board

Connector for S5 Front Connector
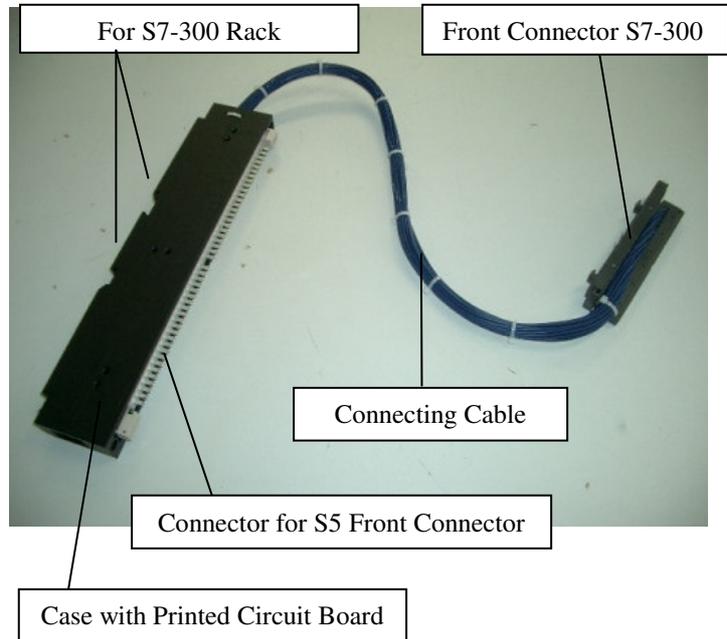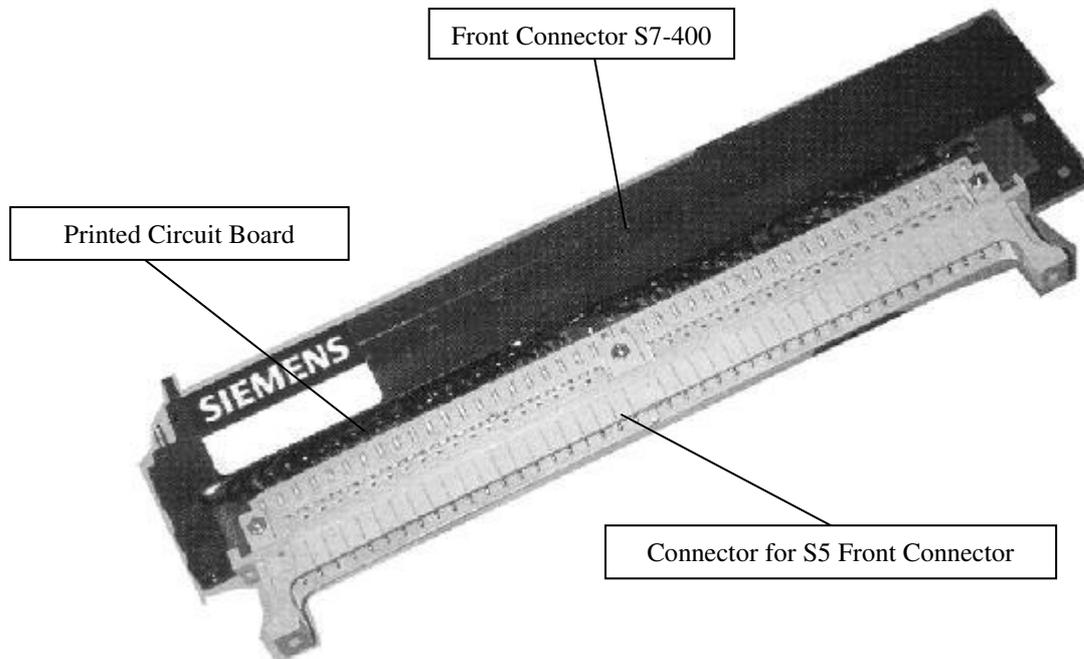
4   Dimensions

4.1   Adapter S7-300
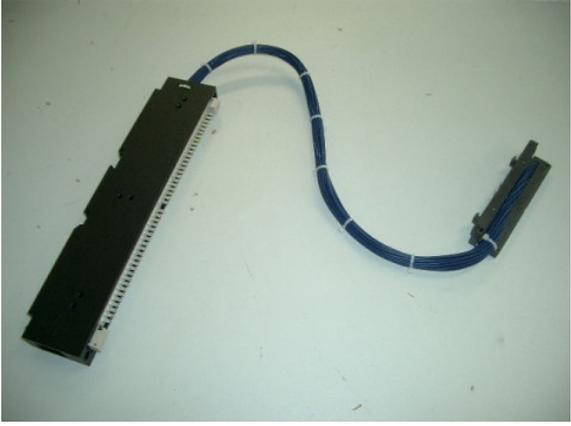
	Case: H x W x D = 330 x 27 x 70 mm Cable: L = 500 mm
	Accessories: Mounting angle (Set) H = 150 to 280 mm B = 80 mm Fitting for S7-300 Rack 6ES7390-1...-0AA0 Rack for Mounting the adapter and S7 is not included

4.2   Adapter S7-400

	H x W x D = 290 x 25 x 70 mm

Depth of Equipment

S7 400   = 237mm+70mm for IMA
S5 150U = 225mm
S5 150K = 259mm
S5 115U = 234mm

Example of a replacement rack S7-400

4.3 Rack Size S7
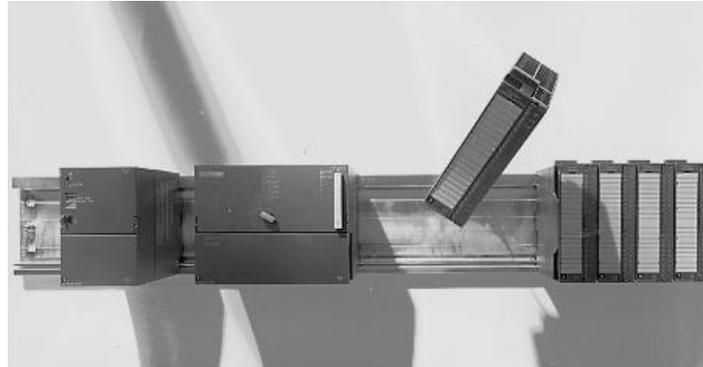
S7-300	
S7-400	
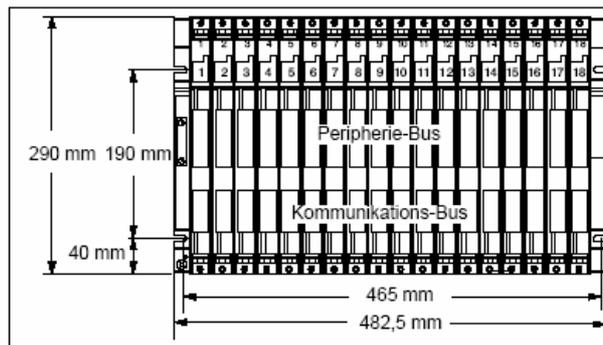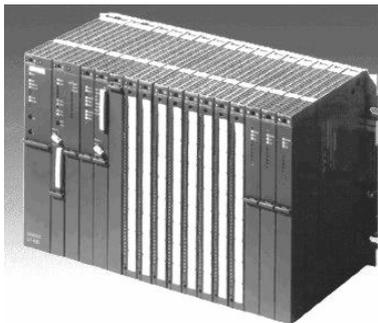
4.4　Rack Size S5

S5 135 U /150 U

S5 150 K
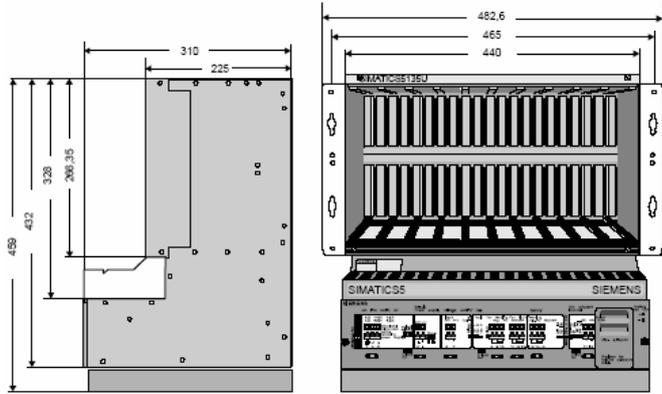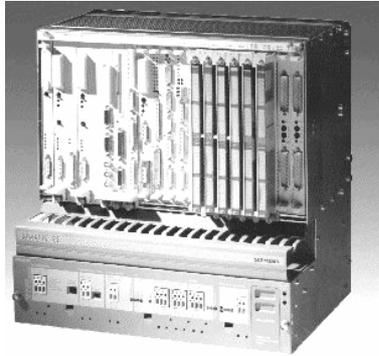
Bild 8/4　Zentralgerät 130K, 130W, 150K oder 150S,
Erweiterungsgerät 182-3K
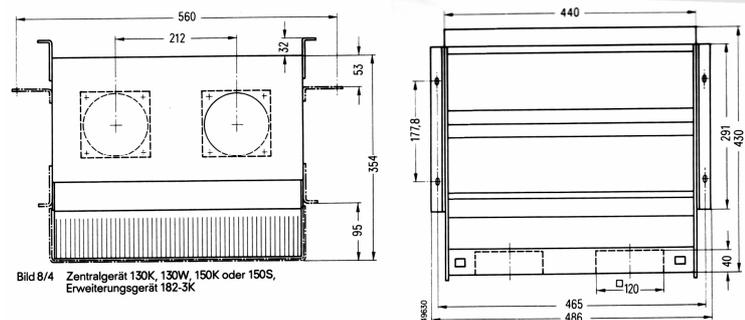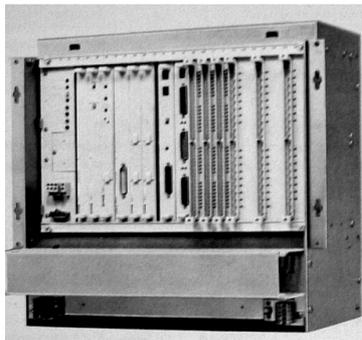
S5 115U
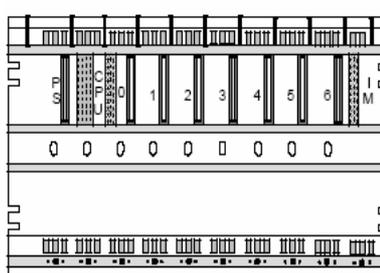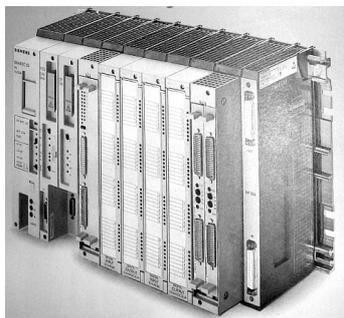
Technische Daten		
Anzahl steckbarer Peripheriebaugruppen	max.	7
Anzahl anschließbarer Erweiterungsgeräte - zentral	max.	3
Maße BxHxT (mm)		483 x 303 x 47
Gewicht		5 kg

5   Power Supply

5.1   Separation of Potentials

There are floating or non-floating IOs. In both cases the power for the module has to be supplied by the user. Another criterion is the short circuit protection of the signals. The outputs have to be tested for the rating of the pins and the printed conductor. Therefore the power supply of signals is rooted in groups of 1/2/4/8/16.
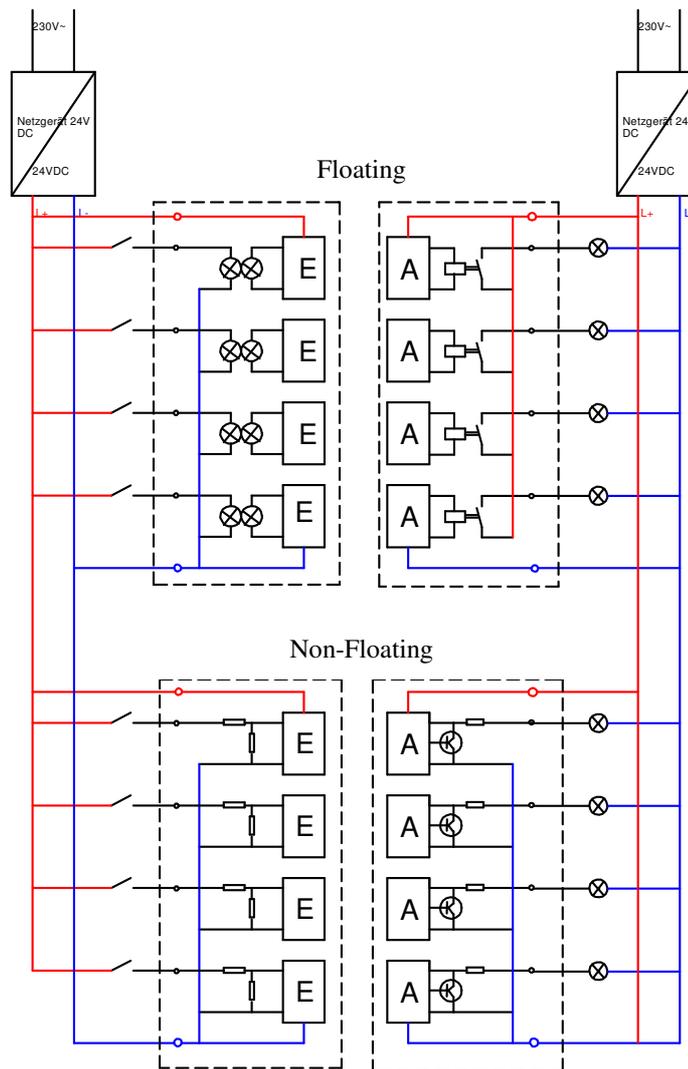
5.2 Power Supply of Inputs
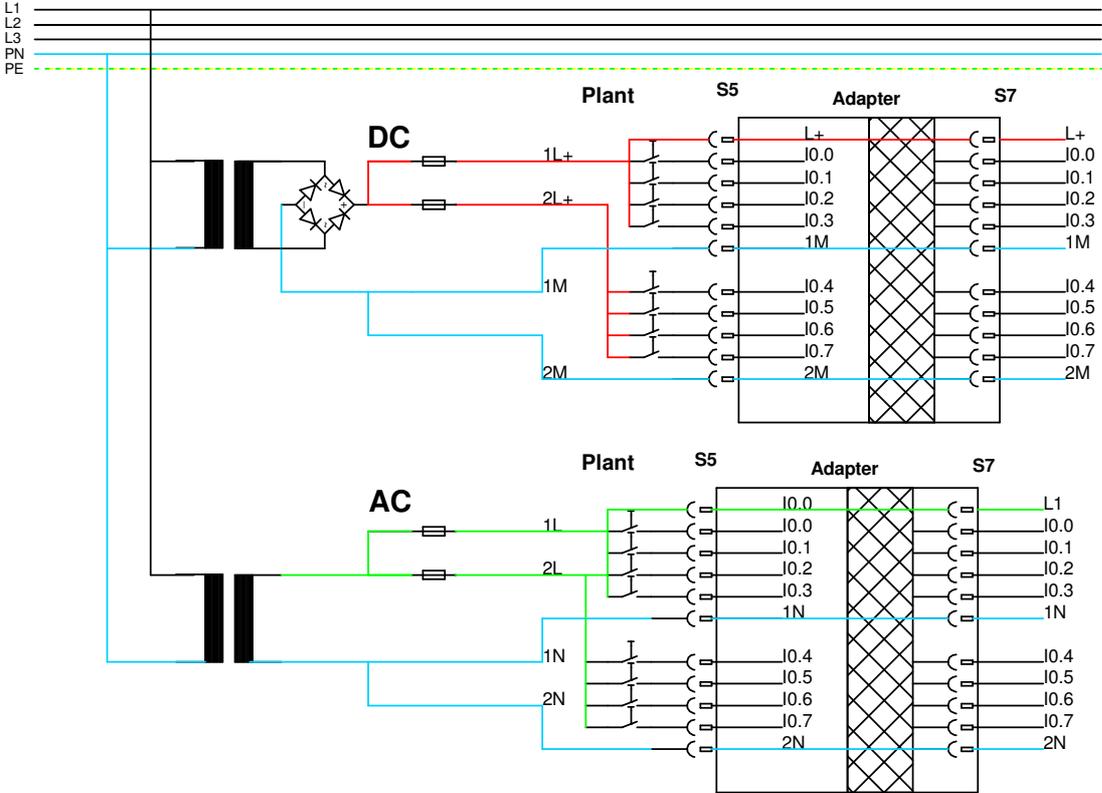
5.3 Power Supply of Outputs
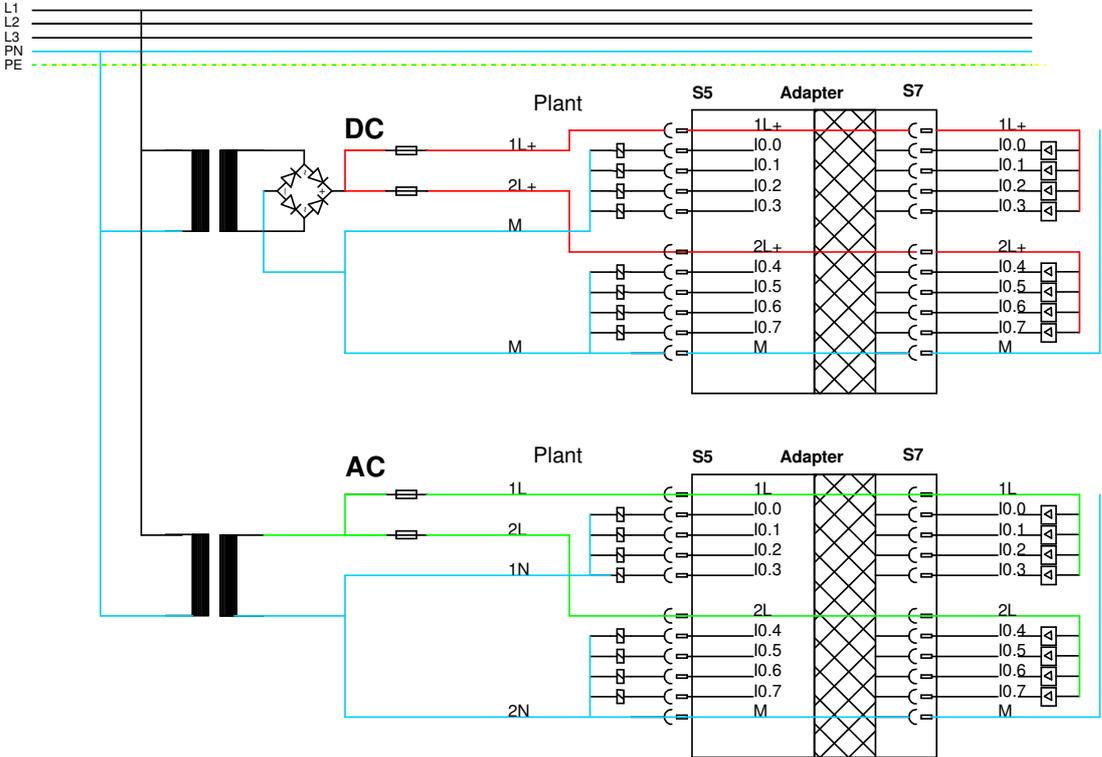
5.4 Rooting
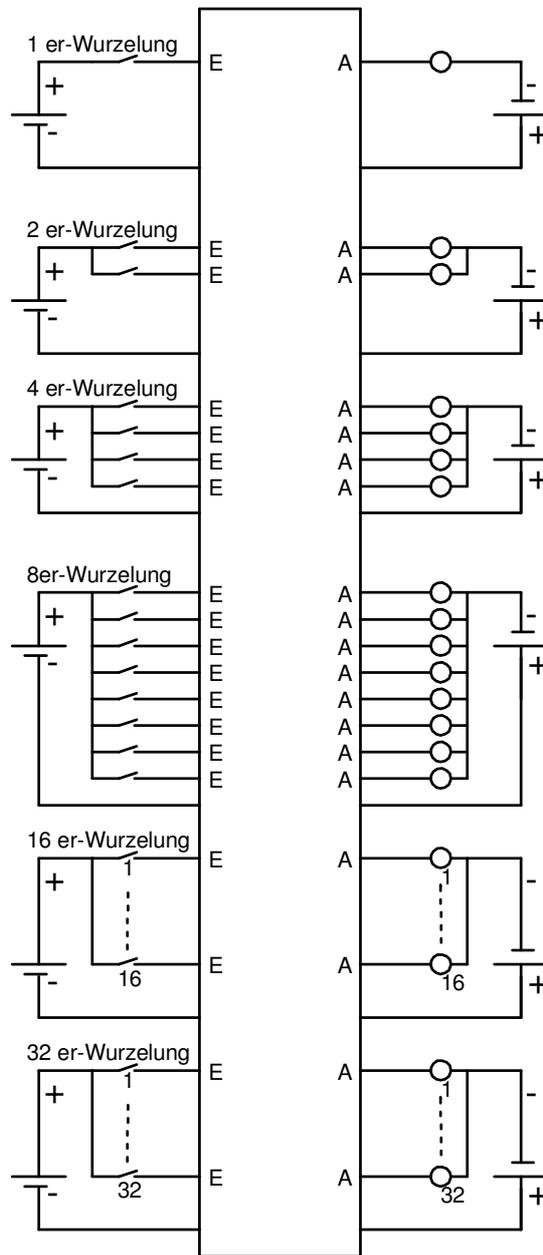
6   Conditions of Sale

6EZ2 041-8UG...

The Interface Module Adapters 6EZ2 041-8UG.. are intended to be used between the front-plugs on the I-O-modules of an obsolete controller and a modern replacement controller SIMATIC S7. Hereby all installation remains at its place; only the controller and the respective software have to be substituted.
For the substitution of the up-to-now-used units the best matching units of S7- components were selected. However there remains a certain deviation in the specific performance. It is up to the user to check the limitations of his own installation, in particular the:

- Power supply
- Signal voltage
- Line-frequency
- Limits of I-O-definitions
- Rooting
- Number of channels
- Loading capacity
- Rating of connectors
- Signal switching frequency

If the S7-units do require an external application of +/- potentials and the old installation did not supply them, these potentials have to be brought to the terminal block on the adapter or to the S5 front connecter .

If the power-rooting of the old installation is not corresponding to the new requirements, the user has to install the additional jumpers.

If the old installation was fed from different power sources, an equipotential bonding contactor has to be applied.

The enable –signal of the S5 units is not present in the S7-system in an identical way and may be considered on handling.

The parametering and selection of modes in the I/O-units has to be done according to the requirements of the S7.

The vendor is not liable for damages that are caused by improper use of the Interface Module Adapters. It is recommended to perform a field-test before the general switch-over of the new installation.

7   Order-Numbers

Index of contents

7.1.1   Adapting from S5 135/155U to S7-300   digital

I/O	Type			Chn	Voltage	Current	Type			Order-Number		
SIMATIC S5 **S5 135 /155U**							**SIMATIC S7** **S7 300**			**Adapter**		
DI	6ES5	**420-**	4UA14	32	24 DC		6ES7 321-	1BL00-	0AA0	**6EZ2 041-8UG**	**01-0DE0**	
		430-	4UA14	32	24 DC			1BL00-	0AA0	**6EZ2 041-8UG**	**01-0DE0**	
		431-	4UA12	16	24/60 DC			1CH00-	0AA0	**6EZ2 041-8UG**	**01-0DE1**	*1
		432-	4UA12	32	24DC			1BL00-	0AA0	**6EZ2 041-8UG**	**01-0DE2**	
		435-	4UA12	16	24/60 AC			1CH00-	0AA0	**6EZ2 041-8UG**	**01-0DE3**	*1
		436-	4UA12	16	115/230 AC			1FH00-	0AA0	**6EZ2 041-8UG**	**01-0DE4**	
		436-	4UB12	8	115/230 AC			1FF10-	0AA0	**6EZ2 041-8UG**	**01-0DE5**	
DO	6ES5	**441-**	4UA14	32	24 DC	0,5 A	6ES7 322-	1BL00-	0AA0	**6EZ2 041-8UG**	**01-0DA0**	*7
		451-	4UA14	32	24 DC	0,5 A		1BL00-	0AA0	**6EZ2 041-8UG**	**01-0DA0**	
		454-	4UA14	16	24 DC	2 A		1BF01-	0AA0	**6EZ2 041-8UG**	**01-0DA2**	*2
		456-	4UA12	16	115/230 AC	2 A		1FF01-	0AA0	**6EZ2 041-8UG**	**01-0DA3**	*3
		456-	4UB12	8	115/230 AC	2 A		5FF00-	0AB0	**6EZ2 041-8UG**	**01-0DA4**	
		458-	4UC11	16	Rel	5 A		1HH01-	0AA0	**6EZ2 041-8UG**	**01-0DA5**	
DI / DO	6ES5	**482-**	4UA11	16/16	24 DC	0,5 A	6ES7 323-	1BL00-	0AA0	**6EZ2 041-8UG**	**01-0EA0**	*4
		482-	4UA20	16/16	24 DC	0,5 A		1BL00-	0AA0	**6EZ2 041-8UG**	**01-0EA0**	*4

Accessories

Mounting angle	Set (2 pices)	**6EZ2 041-8UG 00-0BG0**

*1 Maximum allowable 48V

*2 Switched on 2 boards (module S7)

*3 N must be wired and switched on 2 boards (module S7)

*4 Only for 16 DI / 16 DO

*7 M must be wired

7.1.2   Adapting from S5 135/155U to S7-300   analog

SIMATIC S5 S5 135 /155U							SIMATIC S7 S7 300		Adapter	
I/O	Type			Chn	Voltage	Current	Type		Order-Number	
AI	6ES5	**460-**	4UA13	8	Current and voltage metering		6ES7 331-	7KF02- 0AB0	**6EZ2 041-8UG 01-0AE0**	
		460-	4UA13	8	Only PT100			7PF01- 0AB0	**6EZ2 041-8UG 01-1AE0**	
		460-	4UA13	8	Only current metering			7NF00- 0AB0	**6EZ2 041-8UG 01-2AE0**	
		460-	4UA13	8	Only voltage metering			7NF00- 0AB0	**6EZ2 041-8UG 01-3AE0**	
		465-	4UA13	16	Current and voltage metering			7KF02- 0AB0	**6EZ2 041-8UG 01-0AE2**	*2
		465-	4UA13	8	Only PT100			7PF01- 0AB0	**6EZ2 041-8UG 01-1AE2**	
		465-	4UA13	8	Only PT100			1KF01- 0AB0	**6EZ2 041-8UG 01-2AE2**	
AO	6ES5	**470-**	4UA13	8	Current and voltage output		6ES7 332-	5HD01- 0AB0	**6EZ2 041-8UG 01-0AA0**	*2
		470-	4UA13	8	Current and voltage output			5HF00- 0AB0	**6EZ2 041-8UG 01-1AA0**	
		470-	4UB13	8	Only voltage output			5HD01- 0AB0	**6EZ2 041-8UG 01-0AA0**	*2
		470-	4UB13	8	Only voltage output			5HF00- 0AB0	**6EZ2 041-8UG 01-1AA0**	
		470-	4UC13	8	Current and voltage output			5HD01- 0AB0	**6EZ2 041-8UG 01-0AA0**	*2
		470-	4UC13	8	Current and voltage output			5HF00- 0AB0	**6EZ2 041-8UG 01-1AA0**	

Accessories

Mounting angle	Set (2 pices)	**6EZ2 041-8UG 00-0BG0**

*2 Switched on 2 boards (module S7)

7.2.1   Adapting from S5 115U to S7-300   digital

SIMATIC S5 S5 115U						SIMATIC S7 S7 300		Adapter	
E/A	Typ		Anz	Spanng	Strom	Typ		Bestellnummer	
DE	6ES5	**420-** 7LA11	32	24 DC		6ES7 321-	1BL00- 0AA0	**6EZ2 041-8UG 02-0DE0**	
		430- 7LA12	32	24 DC			1BL00- 0AA0	**6EZ2 041-8UG 02-0DE0**	
		431- 7LA11	16	24-48 UC			1CH00- 0AA0	**6EZ2 041-8UG 02-0DE1**	
		432- 7LA11	16	48-60 UC			1CH00- 0AA0	**6EZ2 041-8UG 02-0DE1**	*1
		434- 7LA12	8	24 DC			1CH00- 0AA0	**6EZ2 041-8UG 02-0DE2**	
		435- 7LA11	16	115 UC			1FH00- 0AA0	**6EZ2 041-8UG 02-0DE3**	*5
		435- 7LB11	16	115 UC			1FF01- 0AA0	**6EZ2 041-8UG 02-0DE4**	*6
		435- 7LC11	8	115 UC			1FF10- 0AA0	**6EZ2 041-8UG 02-0DE5**	*5
		436- 7LA11	16	230 UC			1FH00- 0AA0	**6EZ2 041-8UG 02-0DE3**	*5
		436- 7LB11	16	230 UC			1FF01- 0AA0	**6EZ2 041-8UG 02-0DE4**	*6
		436- 7LC11	8	230 UC			1FF10- 0AA0	**6EZ2 041-8UG 02-0DE5**	*5
DA	6ES5	**441-** 7LA13	32	24 DC	0,5 A	6ES7 322-	1BL00- 0AA0	**6EZ2 041-8UG 02-0DA0**	
		451- 7LA12	32	24 DC	0,5 A		1BL00- 0AA0	**6EZ2 041-8UG 02-0DA0**	
		451- 7LA21	32	24 DC	0,5 A		1BL00- 0AA0	**6EZ2 041-8UG 02-0DA0**	
		453- 7LA11	16	24-60 DC	0,5 A		5GH00- 0AB0	**6EZ2 041-8UG 02-0DA1**	*1
		454- 7LA12	16	24 DC	2 A		1BF01- 0AA0	**6EZ2 041-8UG 02-0DA2**	*2
		456- 7LA11	16	115/230 AC	1 A		1FF01- 0AA0	**6EZ2 041-8UG 02-0DA5**	*3
		456- 7LB11	8	115/230 AC	2 A		5FF00 0AB0	**6EZ2 041-8UG 02-0DA6**	
		458- 7LA12	16	Rel	0,5 A		5HF00- 0AB0	**6EZ2 041-8UG 02-0DA7**	*2
		458- 7LB11	8	Rel	5 A		5HF00- 0AB0	**6EZ2 041-8UG 02-0DA8**	
		458- 7LC11	16	Rel	5 A		5HF00- 0AB0	**6EZ2 041-8UG 02-0DA9**	*2
DI / DO	6ES5	**482-** 7LA11	16/16	24 DC	0,5 A	6ES7 323-	1BL00- 0AA0	**6EZ2 041-8UG 02-0EA0**	

Accessories

Mounting angle	Set (2 pices)	**6EZ2 041-8UG 00-0BG0**

*1 Maximum allowable 48V
*2 Switched on 2 boards (module S7)
*3 N must be wired and switched on 2 boards (module S7)
*5 Only AC in-phase
*6 Only AC and switched on 2 boards (module S7)

7.2.2   Adapting from S5 115U to S7-300   analog

SIMATIC S5 S5 115U							SIMATIC S7 S7 300		Adapter	
E/A	Typ			Anz	Spanng	Strom	Typ		Bestellnummer	
AI	6ES5	**460-**	7LA13	8	Current and voltage metering		6ES7 331-	7KF02- 0AB0	**6EZ2 041-8UG 02-0AE1**	
		460-	7LA13	8	Only current metering			7NF00- 0AB0	**6EZ2 041-8UG 02-1AE1**	
		460-	7LA13	8	Only voltage metering			7NF00- 0AB0	**6EZ2 041-8UG 02-2AE1**	
		465-	7LA13	16	Current and voltage metering			7KF02- 0AB0	**6EZ2 041-8UG 02-0AE2**	*2
		465-	7LA13	8	Only PT100			7PF01- 0AB0	**6EZ2 041-8UG 02-1AE2**	
		465-	7LA13	8	Only PT100			1KF01- 0AB0	**6EZ2 041-8UG 02-2AE2**	
AO	6ES5	**470-**	7LA13	8	Current and voltage output		6ES7 332-	5HD01- 0AB0	**6EZ2 041-8UG 02-0AA0**	*2
		470-	7LA13	8	Current and voltage output			5HF00- 0AB0	**6EZ2 041-8UG 02-1AA0**	
		470-	7LB13	8	Only voltage output			5HD01- 0AB0	**6EZ2 041-8UG 02-0AA0**	*2
		470-	7LB13	8	Only voltage output			5HF00- 0AB0	**6EZ2 041-8UG 02-1AA0**	
		470-	7LC13	8	Current and voltage output			5HD01- 0AB0	**6EZ2 041-8UG 02-0AA0**	*2
		470-	7LC13	8	Current and voltage output			5HF00- 0AB0	**6EZ2 041-8UG 02-1AA0**	

Accessories

Mounting angle	Set (2 pices)	**6EZ2 041-8UG 00-0BG0**

*2 Switched on 2 boards (module S7)

7.3.1   Adapting from S5 130/150K to S7-300   digital

SIMATIC S5 S5 130 /150K							SIMATIC S7 S7 300		Adapter		
I/O	Type			Chn	Voltage	Current	Type		Order-Number		
DI	6ES5	**420-** 3BA11		32	24 DC		6ES7 321-	1BL00- 0AA0	**6EZ2 041-8UG**	**03-0DE0**	*7
		430- 3BA11		32	24 DC			1BL00- 0AA0	**6EZ2 041-8UG**	**03-0DE0**	
		431- 3BA11		16	24-60 DC			1CH00- 0AA0	**6EZ2 041-8UG**	**03-0DE1**	*1
DO	6ES5	**442-** 3AA11		32	24 DC	10 mA	6ES7 322-	1BL00- 0AA0	**6EZ2 041-8UG**	**03-0DA0**	*7
		444- 3AA11		16	24 DC	2 A		1BF01- 0AA0	**6EZ2 041-8UG**	**03-0DA1**	*8
		445- 3AA12		32	24 DC	0,5 A		1BL00- 0AA0	**6EZ2 041-8UG**	**03-0DA2**	*7
		450- 3AA11		32	24 DC	0,12 A		1BL00- 0AA0	**6EZ2 041-8UG**	**03-0DA2**	
		451- 3AA11		16	24 DC	0,5 A		1BH01- 0AA0	**6EZ2 041-8UG**	**03-0DA3**	

Accessories

Mounting angle	Set (2 pices)	**6EZ2 041-8UG**	**00-0BG0**

*1 Maximum allowable 48V

*7 M must be wired

*8 M must be wired and switched on 2 boards (module S7)

SIEMENS
Automation & Drives

7.4.1   Adapting from S5 135/155U to S7-400   digital

SIMATIC S5 S5 135 /155U							SIMATIC S7 S7 400		Adapter
I/O	Type			Chn	Voltage	Current	Type		Order-Number
DI	6ES5	**420-** 4UA14		32	24 DC		6ES7 421-	1BL01- 0AA0	**6EZ2 041-8UG 07-0EU36**
		430- 4UA14		32	24 DC			1BL01- 0AA0	**6EZ2 041-8UG 07-0EU36**
		431- 4UA12		16	24/60 DC			7DH00- 0AB0	**6EZ2 041-8UG 07-0EU20**
		432- 4UA12		32	24 DC			1BL01- 0AA0	**6EZ2 041-8UG 07-0EU33**
		435- 4UA12		16	24/60 AC			7DH00- 0AB0	**6EZ2 041-8UG 37-1EU23**
		436- 4UA12		16	115/230 AC			1FH20- 0AA0	**6EZ2 041-8UG 57-1EU23**
		436- 4UB12		8	115/230 AC			1FH20- 0AA0	**6EZ2 041-8UG 57-1EU20**
DO	6ES5	**441-** 4UA14		32	24 DC	0,5 A	6ES7 422-	1BL00- 0AA0	**6EZ2 041-8UG 07-0AU36**
		451- 4UA14		32	24 DC	0,5 A		1BL00- 0AA0	**6EZ2 041-8UG 07-0AU36**
		454- 4UA14		16	24 DC	2 A		1BH11- 0AA0	**6EZ2 041-8UG 07-1AU23**
		456- 4UA12		16	115/230 AC	2 A		1FH00- 0AA0	**6EZ2 041-8UG 57-1AU23**
		458- 4UC11		16	Rel	5 A		1HH00- 0AA0	**6EZ2 041-8UG 67-0AU23**

Attention: Front Connector with double width needs more place (Width) !

7.4.2   Adapting from S5 135/155U to S7-400   analog

SIMATIC S5 S5 135 /155U							SIMATIC S7 S7 400		Adapter
I/O	Type			Chn	Voltage	Current	Type		Order-Number
AI	6ES5	**460-**	4UA13	8	Only current metering		6ES7 431-	1KF00- 0AB0	**6EZ2 041-8UG 77-0EU11**
		460-	4UA13	8	Only voltage metering			1KF00- 0AB0	**6EZ2 041-8UG 77-0EU12**
		465-	4UA13	8	Only PT100			7KF10- 0AB0	**6EZ2 041-8UG 77-0EU20**
		465-	4UA13	16	Current and voltage metering			0HH00- 0AB0 7QH00- 0AB0	**6EZ2 041-8UG 77-0EU21**
AO	6ES5	**470-**	4UA13	8	Only current output		6ES7 432-	1HF00- 0AB0	**6EZ2 041-8UG 77-0AU11**
		470-	4UC13	8	Only current output			1HF00- 0AB0	**6EZ2 041-8UG 77-0AU11**
		470-	4UA13	8	Only voltage output			1HF00- 0AB0	**6EZ2 041-8UG 77-0AU12**
		470-	4UB13	8	Only voltage output			1HF00- 0AB0	**6EZ2 041-8UG 77-0AU12**
		470-	4UC13	8	Only voltage output			1HF00- 0AB0	**6EZ2 041-8UG 77-0AU12**

Attention: Front Connector with double width needs more place (Width) !

7.5.1 Adapting from S5 115U to S7-400 digital

SIMATIC S5 S5 115U							SIMATIC S7 S7 400		Adapter	
I/O	Type			Chn	Voltage	Current	Type		Order-Number	
DI	6ES5	**420-**	7LA11	32	24 DC		6ES7 421-	1BL01- 0AA0	**6EZ2 041-8UG**	**05-0EU36**
		430-	7LA12	32	24 DC			1BL01- 0AA0	**6EZ2 041-8UG**	**05-0EU36**
		431-	7LA11	16	24-48 UC			7DH00- 0AB0	**6EZ2 041-8UG**	**65-0EU22**
		432-	7LA11	16	48-60 UC			7DH00- 0AB0	**6EZ2 041-8UG**	**65-0EU22**
		434-	7LA12	8	24 DC			7DH00- 0AB0	**6EZ2 041-8UG**	**05-0EU10**
		435-	7LA11	16	115 UC			1FH20- 0AA0	**6EZ2 041-8UG**	**55-0EU22**
		435-	7LB11	16	115 UC			1FH20- 0AA0	**6EZ2 041-8UG**	**55-0EU21**
		435-	7LC11	8	115 UC			1FH20- 0AA0	**6EZ2 041-8UG**	**55-0EU10**
		436-	7LA11	16	230 UC			1FH20- 0AA0	**6EZ2 041-8UG**	**55-0EU22**
		436-	7LB11	16	230 UC			1FH20- 0AA0	**6EZ2 041-8UG**	**55-0EU21**
		436-	7LC11	8	230 UC			1FH20- 0AA0	**6EZ2 041-8UG**	**55-0EU10**
DO	6ES5	**441-**	7LA13	32	24 DC	0,5 A	6ES7 422-	1BL00- 0AA0	**6EZ2 041-8UG**	**05-0AU33**
		451-	7LA12	32	24 DC	0,5 A		1BL00- 0AA0	**6EZ2 041-8UG**	**05-0AU33**
		451-	7LA21	32	24 DC	0,5 A		1BL00- 0AA0	**6EZ2 041-8UG**	**05-0AU33**
		454-	7LA12	16	24 DC	2 A		1BH11- 0AA0	**6EZ2 041-8UG**	**05-0AU22**
		455-	7LA11	16	115 AC	2 A		1HH00- 0AA0	**6EZ2 041-8UG**	**45-0AU21**
		456-	7LA11	16	230 AC	1 A		1FH00- 0AA0	**6EZ2 041-8UG**	**55-0AU22**
		458-	7LC11	16	Rel	5 A		1HH00- 0AA0	**6EZ2 041-8UG**	**65-0AU22**

Attention: Front Connector from S5/115U needs more place (Width) !

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7.5.2   Adapting from S5 115U to S7-400   **analog**

SIMATIC S5
S5 115U

SIMATIC S7
S7 400

Adapter

I/O	Type			Chn	Voltage	Current	Type		Order-Number	
AI	6ES5	**460-**	7LA13	8	Only current metering		6ES7 431-	1KF00- 0AB0	**6EZ2 041-8UG**	**75-0EU11**
		460-	7LA13	8	Only voltage metering			1KF00- 0AB0	**6EZ2 041-8UG**	**75-0EU12**
		465-	7LA13	8	Only PT100			7KF10- 0AB0	**6EZ2 041-8UG**	**75-0EU20**
		465-	7LA13	16	Current and voltage metering			0HH00- 0AB0 7QH00- 0AB0	**6EZ2 041-8UG**	**75-0EU21**
AO	6ES5	**470-**	7LA13	8	Current and voltage output		6ES7 432-	1HF00- 0AB0	**6EZ2 041-8UG**	**75-0AU11**
		470-	7LB13	8	Only voltage output			1HF00- 0AB0	**6EZ2 041-8UG**	**75-0AU11**
		470-	7LC13	8	Current and voltage output			1HF00- 0AB0	**6EZ2 041-8UG**	**75-0AU11**

Attention: Front Connector from S5/115U needs more place (Width) !

7.6.1   Adapting from S5 130/150K to S7-400   **digital**

SIMATIC S5
S5 130 /150K

SIMATIC S7
S7 400

Adapter

I/O	Type			Chn	Voltage	Current	Type			Order-Number		
DI	6ES5	**420-**	3BA11	32	24 DC		6ES7 421-	1BL01-	0AA0	**6EZ2 041-8UG**	**08-0DE0**	*7
		430-	3BA11	32	24 DC			1BL01-	0AA0	**6EZ2 041-8UG**	**08-0DE0**	
		431-	3BA11	16	24-60 DC			7DH00-	0AB0	**6EZ2 041-8UG**	**08-0DE1**	
DO	6ES5	**442-**	3AA11	32	24 DC	10 mA	6ES7 422-	1BL00-	0AA0	**6EZ2 041-8UG**	**08-0DA1**	*7
		444-	3AA11	16	24 DC	2 A		1BH11-	0AA0	**6EZ2 041-8UG**	**08-0DA2**	*7
		445-	3AA12	32	24 DC	0,5 A		1BL00-	0AA0	**6EZ2 041-8UG**	**08-0DA0**	*7
		450-	3AA11	32	24 DC	0,12 A		1BL00-	0AA0	**6EZ2 041-8UG**	**08-0DA0**	
		451-	3AA11	16	24 DC	0,5 A		1BH11-	0AA0	**6EZ2 041-8UG**	**08-0DA3**	

*7   M must be wired