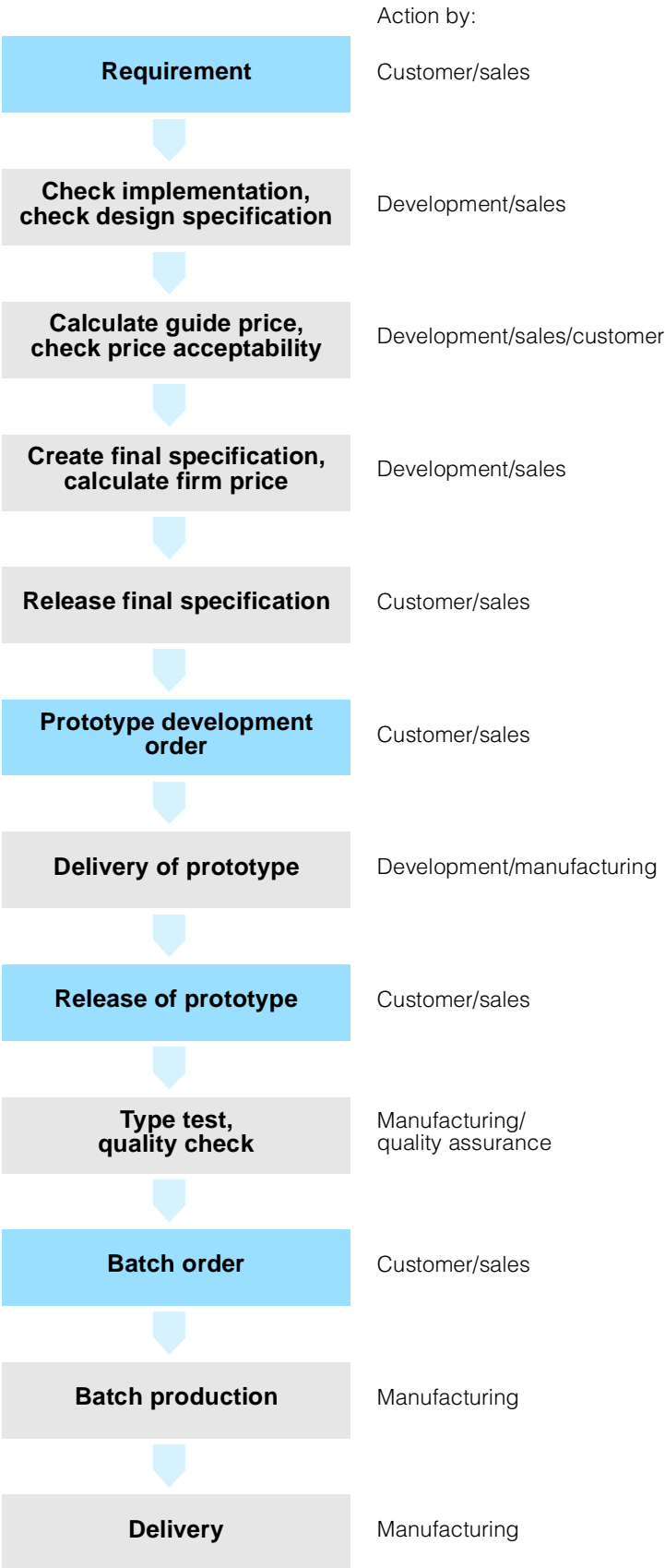


SIGNUM 3SB4 Complete Operator Communication Systems

Customer-Specific Equipment

Description

Scheme for the development and manufacture of SIGNUM 3SB4 customer-specific operator systems



Area of application

SIGNUM 3SB4 complete operator communication systems are interfaces that permit a dialog between man and machine. The systems include the operator panel and the associated connection options.

Design

SIGNUM 3SB4 complete operator systems are designed and supplied to meet customer-specific requirements. The Order No. is built up from modules according to the design.

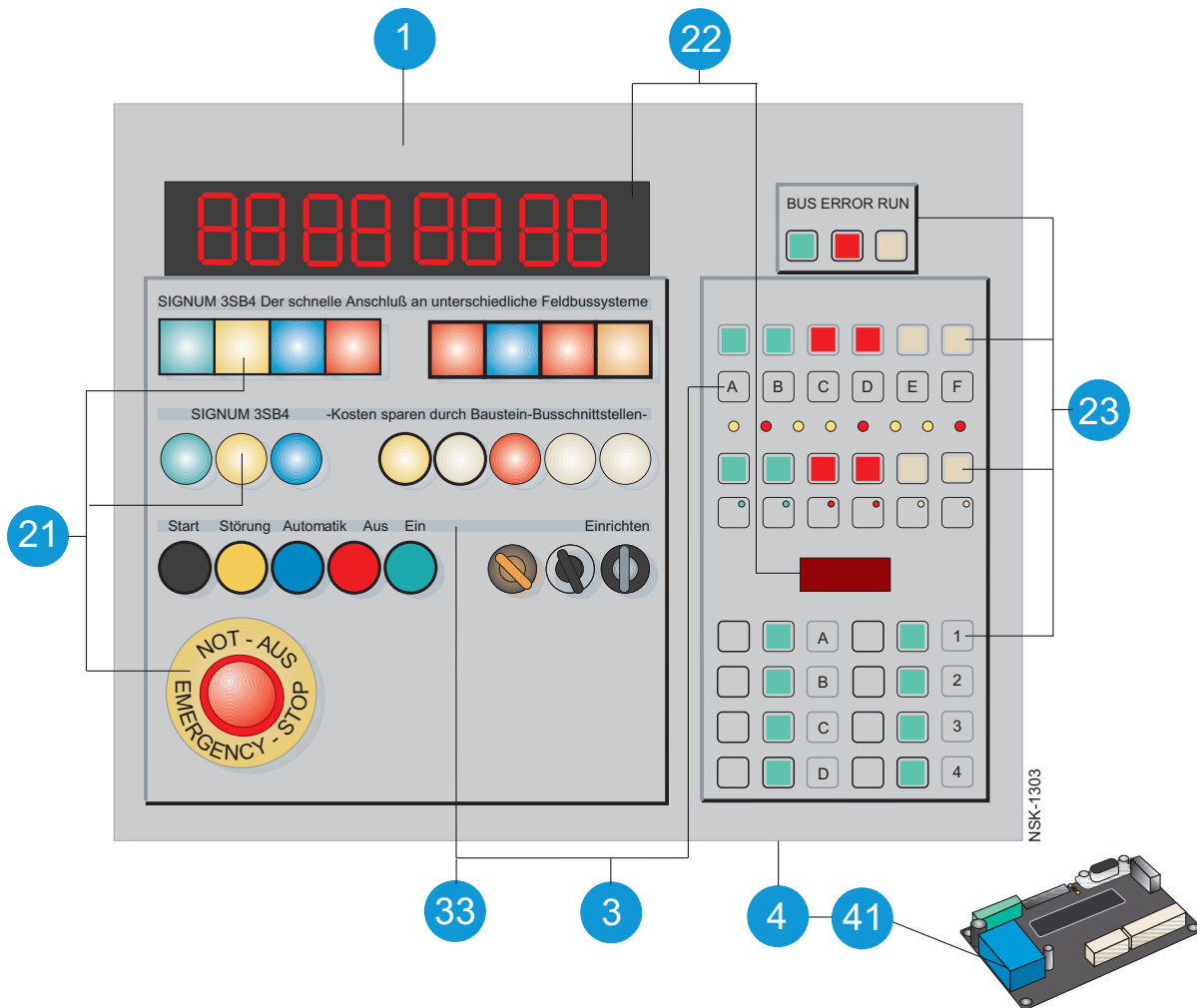
All the necessary equipment and services are available from one source.

- Advice during conception and design,
- Design suggestions,
- Development and supply of hardware by selection of suitable equipment,
- Development and supply of layouts for the printed circuit boards,
- Development and supply of the necessary software (function blocks, GSD files) for interfacing to the PLC,
- Preparation of necessary manufacturing and testing equipment,
- Manufacturing
- Delivery with documentation (complete with necessary software),
- Customer service

SIGNUM 3SB4 Complete Operator Communication Systems

Customer-Specific Equipment

Description



Design options

1 Front plates

- 11 Any size and shape
- 12 Various materials, e.g. blank or anodized aluminum, sheet steel, plastic; also foil coated
- 13 Various colours

2 Equipment

- 21 Conventional 3SB1, 3SB2 and SIGNUM 3SB3 pushbutton units and indicator lights, round or square design
- 22 Indication and display components, e.g. multiple 7-segment displays and LED text displays
- 23 Membrane keyboards with and without embossing, with metal spring washers or short-stroke keys, with point illumination or fully-illuminated keypads.
- 24 Integration of other flush-mounting equipment, e.g. instruments, potentiometer drives

3 Inscription

- 31 Printed on the front plate, anodized.
- 32 Direct on the operating surface of the pushbuttons or using inserts or backing plates
- 33 Using foils: printed, with push-in strips

4 Connections

- All designs can be supplied ready to connect if required
- 41 With interface for connection to an AS interface, PROFIBUS-DP and other field bus systems
- 42 Conventional with screw connections or with solder connections for assembly on printed circuit boards



5 Enclosures

- All versions can be supplied in enclosures if required

SIGNUM 3SB4 Complete Operator Communication Systems

Customer-Specific Equipment

Selection and ordering data

Item/description	Protection class	Order No.	Price 1 unit	Weight approx. kg	Packing Unit
Operator panel with foil keyboard and SIGNUM 3SB3 control devices 	IP 65	3SB40 00-0AZ K0Y	on request		1
Operator panel with foil keyboard and SIGNUM 3SB3 control devices	IP 65	3SB40 00-1AZ K0Y	on request		1
Operator panel with SIGNUM 3SB3 control devices 	IP 65	3SB40 00-2AZ K0Y	on request		1
Foils (DIN A4) for inscription strips for user inscriptions, also suitable for laser printer	white	3SB49 03-0A	on request	0.1	10

Scheme for building Order Nos.

Connections

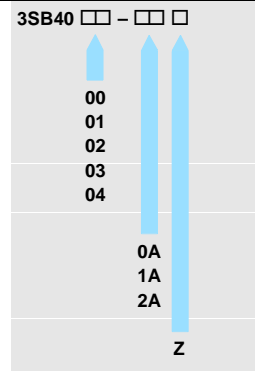
- unwired
- conventional wiring
- with AS interface
- with PROFIBUS-DP interface
- with other field bus interfaces

Design

- equipped with foil keyboard
- equipped with foil keyboard and 3SB control devices.
- equipped with 3SB control devices.

Customer-specific, general

In addition, Order Nos. for customer-specific designs can be specified after the 10th position of the Order No.



Technical data


Field bus interfaces for 3SB4 complete operator system

Type	AS-i 4I/4O	AS-i 16I/16O	PROFIBUS-DP/I
Supply voltage	from AS-i: 24 V DC	from AS-i: 24 V DC	24 V DC
Static outputs	4	16	8
Static inputs	4	16	–
Multiplex LED	–	–	64
Multiplex keys	–	–	64
Serial interface	no	yes	yes
MFI interface	no	no	yes

SIGNUM 3SB4 Complete Operator Communication Systems

Numerical LED Display

Selection and ordering data

Design Character height, digits	Colour	Order No.	Price	Weight approx.	Packing
			1 unit	kg	Unit
 Numerical LED display for flush mounting, with AS interface¹⁾ 13 mm, 4 digits 30 mm, 4 digits	red	3SB41 02-1B 3SB41 02-2B		0.3	1
	green			0.3	
	red	3SB41 02-1D 3SB41 02-2D		0.3	
	green			0.3	
Numerical LED display for flush mounting, with A/D converter²⁾ 10 mm, 3 ½ digits 13 mm, 3 ½ digits 20 mm, 3 ½ digits	red	3SB41 01-1AD-Z		0.3	1
	red	3SB41 01-1BD-Z		0.3	
	red	3SB41 01-1CD-Z		0.3	

Technical data

Numerical LED display for flush mounting

Type of display	7-segment LED	
Colour	red or green	
Operating voltage	24 V DC (via AS-i bus for AS-Interface)	
Power consumption for digit height	10 mm 13 mm 20 mm 30 mm	0.15 W per digit 0.15 W per digit 0.2 W per digit 0.3 W per digit
Display	with A/D converter with AS-i bus	000 ... ±1999 0 ... 9 and A, b, -, blank
Decimal point	fixed adjustment as specified (version with A/D converter)	
Input range	0 ... ±2 V DC, 0 ... ±10 V DC, 0 ... ±20 mA, 4 ... 20 mA	
Housing	Flush mounting housing in accordance with DIN, metal	
Fixing	Screw clamps in accordance with DIN	
Protection class	IP 54 or IP 65 from the front	
Ambient temperature	in operation during storage	0 to +50 °C -25 to +70 °C
EMC	In accordance with Guideline 89/336/EWG (or EMVG)	
Interference transmission	Basic specification EN 50 081-2, issued July 1993 Product specification EN 55 011, Group 1/2, Class A, issued March 1991 Limit value curve identical to EN 55 022	
Interference withstand capability	Basic specification EN 50 082-2, issued March 1995	

1) A function block is available for interface with the PLC (S7-300 and S7-400). This can be supplied with the order. Add "-Z" to the Order No and state "with function block" in text.

2) The input range and the measured variable must be stated in text when ordering.
Input ranges according to the table above without additional price. Measured variables and physical units, e.g. m, °C, mbar, m³/h. Additional price on request.