

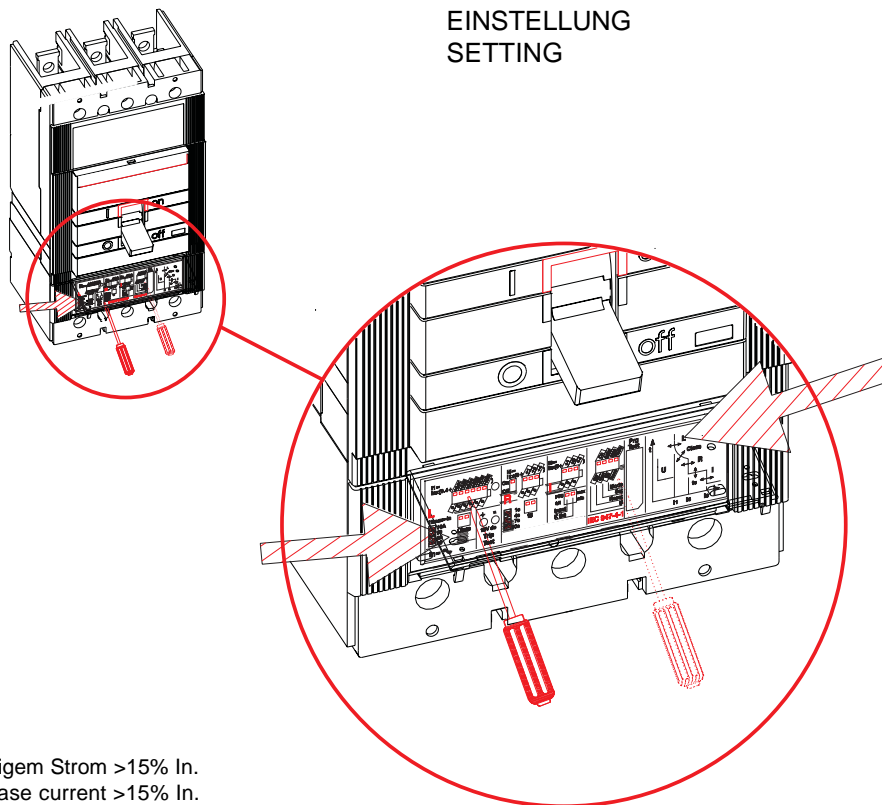
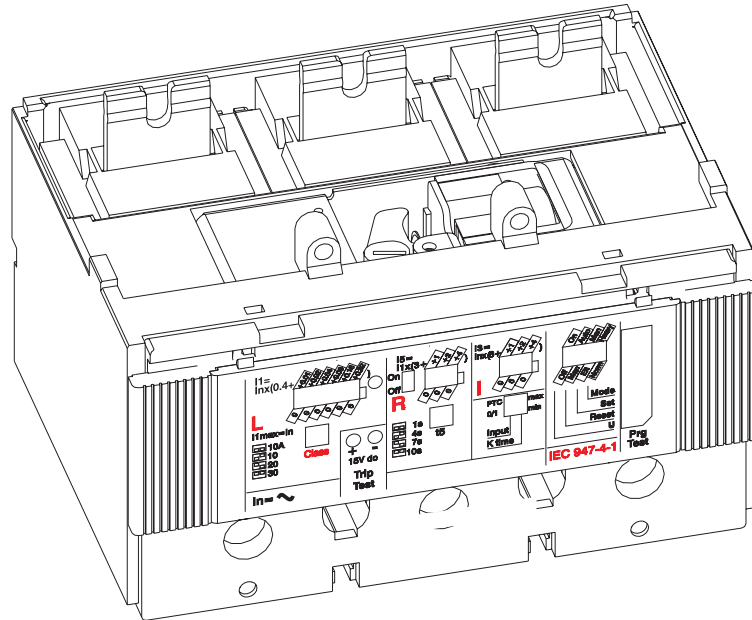
## MIKROPROZESSOR-GESTEUERTER ÜBERSTROMAUSLÖSER FÜR MOTOR SCHUTZ MICROPROCESSOR BASED OVERCURRENT RELEASE FOR MOTOR PROTECTION



für/for 3VU2.3  
3VU2.4  
3VU2.5  
EN60947, IEC60947

Montageanleitung/Assembly Instructions

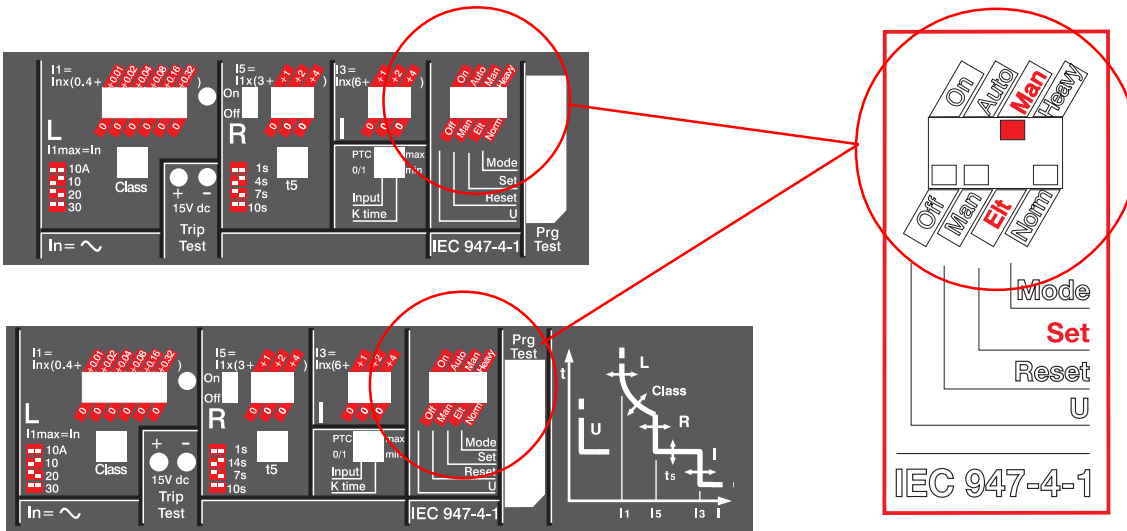
Bestell-Nr./Order No.: 3ZX1012-0VU23-3BN1



Selbstgespeist bei einphasigem Strom >15% In.  
Self-powered for single phase current >15% In.

A

Manuelle Standardeinstellung  
Manual default setting

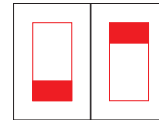
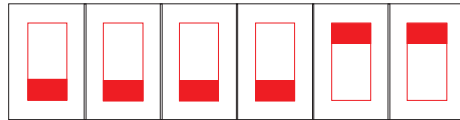


Beispiel für die Einstellung der DIP-Schalter / Dip-switch setting example

$$I1 = 0.88 \times I_n (0.4 + 0.16 + 0.32)$$

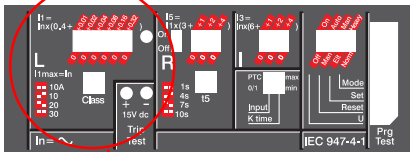
$$t1 = \text{Klasse / Class } 10$$

Ansprechgrenze  
Threshold  
I1

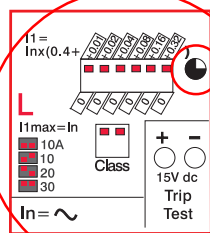


Klasse  
Class  
t1

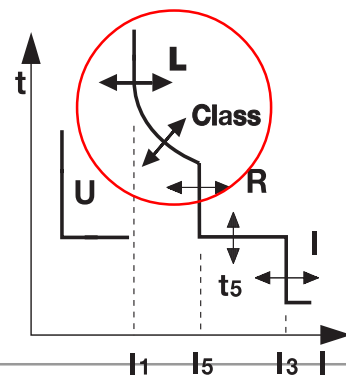
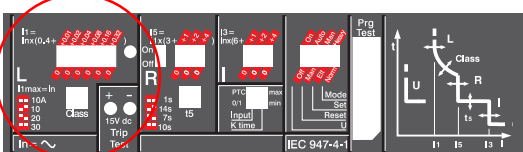
B



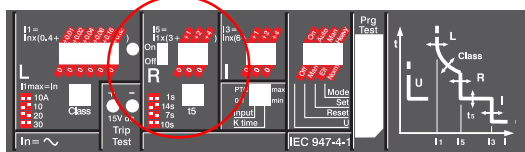
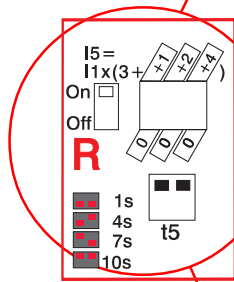
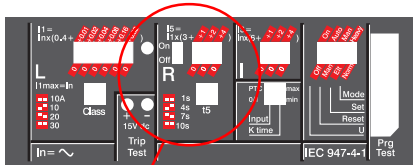
	I <sub>u</sub> (A)	I <sub>n</sub> (A)	I <sub>1</sub> (A)						
			1	0.99	0.98	...	0.42	0.41	0.4
<b>3VU20.3</b>	250	100	100	99	98	...	42	41	40
	250	160	160	158.4	156.8	...	67.2	65.6	64
	250	200	200	198	196	...	84	82	80
<b>3VU20.4</b>	400	320	320	316.8	313.6	...	134.4	131.2	128
<b>3VU20.5</b>	630	400	400	396	392	...	168	164	160
	630	630	630	623.7	617.4	...	264.6	258.3	252



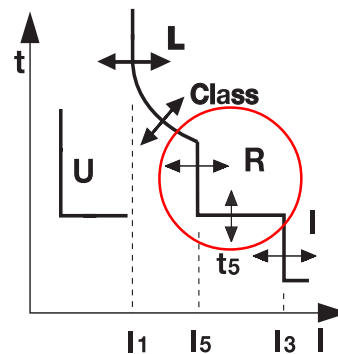
Schutzzustand Protection Status	Strom Current	Zustand der LED Led Status
Normal Normal	$I < 0,9 I_1$	Aus Off
Voralarm Prelarm	$0,9 I_1 < I < 1,1 I_1$	Ein On
Alarm Alarm	$I < 1,1 I_1$	Blinken Blink



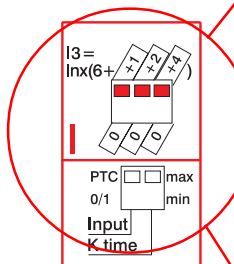
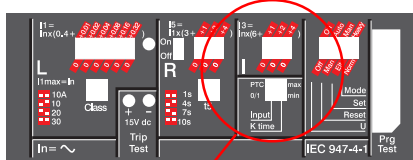
C



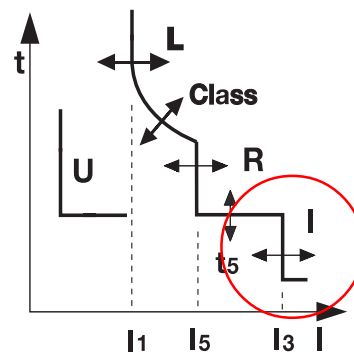
	I <sub>u</sub> (A)	I <sub>n</sub> (A)	I <sub>1</sub> (A)							
			3	4	5	6	7	8	9	10
<b>3VU20.3</b>	250	100	300	400	500	600	700	800	900	1000
	250	160	480	640	800	960	1120	1280	1440	1600
	250	200	600	800	1000	1200	1400	1600	1800	2000
<b>3VU20.4</b>	400	320	960	1280	1600	1920	2240	2560	2880	3200
<b>3VU20.5</b>	630	400	1200	1600	2000	2400	2800	3200	3600	4000
	630	630	1890	2520	3150	3780	4410	5040	5670	6300



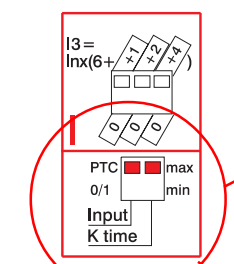
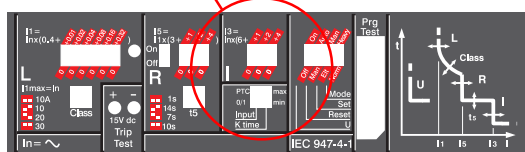
**D**



	I <sub>u</sub> (A)	I <sub>n</sub> (A)	I <sub>1</sub> (A)									
			6	7	8	9	10	11	12	13		
<b>3VU20.3</b>	250	100	600	700	800	900	1000	1100	1200	1300		
	250	160	960	1120	1280	1440	1600	1760	1920	2080		
	250	200	1200	1400	1600	1800	2000	2200	2400	2600		
<b>3VU20.4</b>	400	320	1920	2240	2560	2880	3200	3520	3840	4160		
<b>3VU20.5</b>	630	400	2400	2800	3200	3600	4000	4400	4800	5200		
	630	630	3780	4410	5040	5670	6300	6930	7560	8190		



**E**

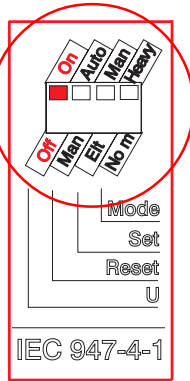
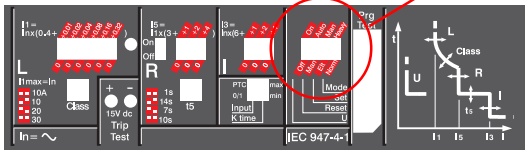
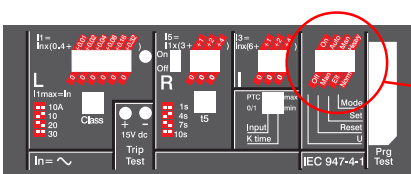


Input	PTC	Angeschlossen an einen PTC-Halbleiterfühler Mod. Siemens B59355-M130-A70 oder einen gleichwertigen Fühler. Maximale Länge der Verbindung 50 m Connected with temperature dependent resistor (PTC) type Siemens B59355-M130-A70 or similar. Max connection length = 50 mt.
	0/1	Angeschlossen an einen potentialfreien Schließer oder Öffner. Maximale Länge der Verbindung 50 m Connected with NO or NC contact without voltage. Max connection length = 50 mt.

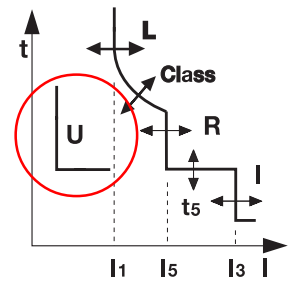
**!** Input: Ohne PTC 0/1 einstellen.  
Input: without PTC set 0/1

K time	Öffnungszeit des Schützes	max	~ 160 ms
	Contactor tripping time	min	~ 80 ms

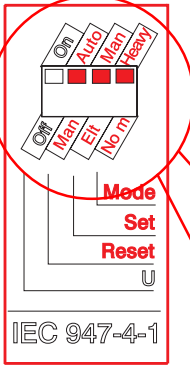
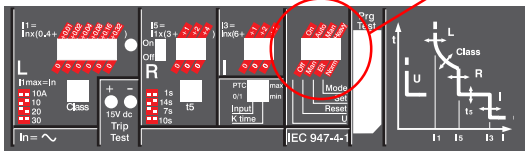
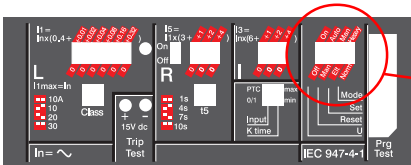
**F**



	Iu (A)	In (A)	I9 (A)
3VU20.3	250	100	40
	250	160	64
	250	200	80
3VU20.4	400	320	128
3VU20.5	630	400	160
	630	630	252



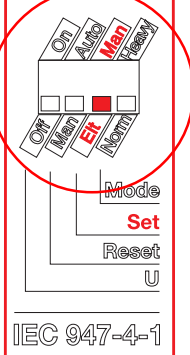
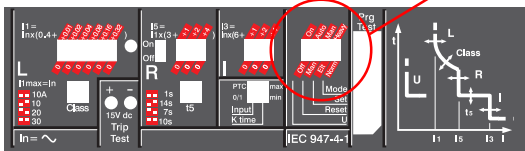
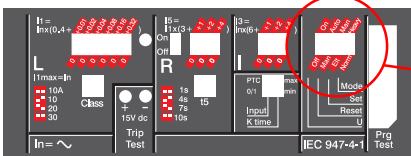
## G



Mode	Heavy	Motorschutz Motor protection
	Norm	Keine Verwendung No use
Set	Man	Einstellung über DIP-Schalter (siehe Abs. B) Setting by dip-switch (see par.B)
	Elt	Einstellung über Kommunikationssystem (siehe Abs. L) Setting by communication system (see par.L)
Reset	Man	Manuelles Zurücksetzen (Normal) durch den Benutzer. Manual reset (Normal) by customer.

## H

### Elektronische Standardeinstellung Electronic default set



L	1xIn - 10A
R	Off
I	13xIn
U	Off
Input	0/1
Mode	Heavy
Ktime	Min

### Elektronische Parameterwerte Electronic parameters value

Schutzfunktion Protection	Bezeichnung Name	Bereich Range	Schritte für elektronische Einstellung Step for electronic set
L Überlast / Overload	I1	0,4 ... 1,0 x In	0,01 x In
	t1	4,0 ... 24,0 s	1 s
R Läuferblockierung / Locked rotor	I5	3,0 ... 10 x I1+Off	0,1 x I1 + Off
	t5	1 ... 10 s	0,5 s
I Kurzschluss / Short circuit	I3	6,0 ... 13 x In	0,1 x In
	t3	-	-
U Unsymmetrie / Unbalance	I6	0,4 + Off	On + Off
	t6	4 s	-

## I

**Technical Assistance:** Telephone: +49 (0) 9131-7-43833 (8<sup>00</sup> - 17<sup>00</sup> MEZ)  
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Internet: [www.siemens.de/lowvoltage/technical-assistance](http://www.siemens.de/lowvoltage/technical-assistance)

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