Setting Instruction Example
for **SPI1021 in Dubai /UAE**

ATTENTION:
Only for versions with DEWA-programs 4-6, delivered since October 2016.
How to check if the required program 4 is available you see on page 4

ZIEHL industrie-elektronik GmbH + Co KG
Daimlerstrasse 13, 74523 Schwaebisch Hall, Germany
+49 791 504-0, info@ziehl.de, www.ziehl.com

Contents

Link to full manual and other documents

Program overview with default settings

When changing programs, all parameters are reset to the default settings.

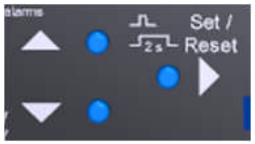
Menu item	Parameter / Unit			Default setting CEI 0-21 3AC+N 230V Pr 1 *	3AC 400V Pr2	1AC+N 230V Pr3	DEWA 3AC+N 230V Pr4	3AC 400V Pr5	3AC 100V Pr6	Users data
U-- 59.S2 59>S2	U--	Alarm on/off		oFF	oFF	oFF	oFF	oFF	oFF	on
	U--	**Overvoltage**	V	264	458	264	264	458	115	
	H--	Hysteresis	V	10.5	17.5	10.5	10.5	17.5	4.5	
	dAL	Response time	s	0.10	0.10	0.10	0.10	0.10	0.10	0,2
	doF	OFF-delay	s	0	0	0	0	0	0	
U- 59.S1 59>S1	U-	Alarm on/off		on	on	on	on	on	on	
	U-	**Overvoltage**	V	264	458	264	253	438	120	
	H-	Hysteresis	V	10.5	17.5	10.5	10.5	17.5	4.3	
	dAL	Response time	s	0.20	0.20	0.20	0.20	0.20	0.60	90
	doF	OFF-delay	s	0	0	0	0	0	0	
Un 59-Av	Un	Alarm on/off		on	on	on	on	on	on	
	Un	**Overvoltage**	V	253	438	253	253	438	110	
	Hn	Hysteresis	V	10.0	17.5	10.0	10.0	17.5	4.3	
	dAL	Response time	s	3.00	3.00	3.00	3.00	3.00	3.00	
	doF	OFF-delay	s	0	0	0	0	0	0	
U- 27.S1 27<S1	U-	Alarm on/off		on	on	on	on	on	on	
	U-	**Undervoltage**	V	196	339	196	196	339	85	
	H-	Hysteresis	V	8.0	13.5	8.0	8.0	13.5	3.5	
	dAL	Response time	s	0.40	0.40	0.40	0.40	0.40	1.50	
	doF	OFF-delay	s	0	0	0	0	0	0	
U-- 27.S2 27<S2	U--	Alarm on/off		on	on	on	on	on	on	
	U--	**Undervoltage**	V	92	159	92	92	159	3.0	
	H--	Hysteresis	V	3.7	3.7	3.7	3.7	6.4	1.5	
	dAL	Response time	s	0.20	0.20	0.20	0.20	0.20	0.20	
	doF	OFF-delay	s	0	0	0	0	0	0	
F-- 81.S2 81>S2	F--	Alarm on/off		on	on	on	on	on	on	oFF
	F--	**Overfrequency**	Hz	51.50	51.50	51.50	54.00	54.00	54.00	
	H--	Hysteresis	Hz	0.10	0.10	0.10	0.10	0.10	0.10	
	dAL	Response time	s	0.10	0.10	0.10	10.0	10.0	10.0	
	doF	OFF-delay	s	0	0	0	0	0	0	
F- 81.S1 81>S1	F-	Alarm on/off		on	oFF	oFF	oFF	oFF	oFF	on
	F-	**Overfrequency**	Hz	50.50	50.50	50.50	52.50	52.50	52.50	
	H-	Hysteresis	Hz	0.10	0.10	0.10	0.10	0.10	0.10	
	dAL	Response time	s	10.00	0.10	0.10	0.10	0.10	0.10	
	doF	OFF-delay	s	0	0	0	0	0	0	

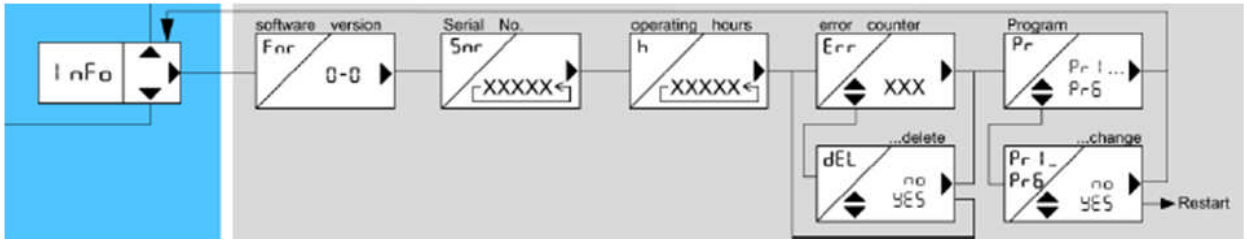
Menu item	Parameter / Unit			CEI 0-21 3AC+N 230V Pr 1	3AC 400V Pr2	1AC+N 230V Pr3 *	DEWA 3AC+N 230V Pr4	3AC 400V Pr5	3AC 100V Pr6	Users data
F- 81.S1 81<S1	F-	Alarm on/off		oFF	oFF	oFF	oFF	oFF	oFF	on
	F-	**Underfrequency**	Hz	49.50	49.50	49.50	47.50	47.50	47.50	
	H-	Hysteresis	Hz	0.10	0.10	0.10	0.10	0.10	0.10	
	dAL	Response time	s	0.10	0.10	0.10	4.00	4.00	4.00	
	doF	OFF-delay	s	0	0	0	0	0	0	
F-- 81.S2 81<S2	F--	Alarm on/off		on	on	on	on	on	on	oFF
	F--	**Underfrequency**	Hz	47.50	47.50	47.50	46.00	46.00	46.00	
	H--	Hysteresis	Hz	0.10	0.10	0.10	0.10	0.10	0.10	
	dAL	Response time	s	0.10	0.10	0.10	10.0	10.0	10.0	
	doF	OFF-delay	s	0	0	0	0	0	0	
UonF	UonF	Alarm on/off		oFF	oFF	oFF	on	on	on	
	UonF	Spannung 0,2 Un	V	46	80	46	46	80	20	
u5r 78	u5r	Alarm on/off		oFF	oFF	oFF	oFF	oFF	oFF	on
	u5r	**Vector shift**	°	10.0	10.0	10.0	10.0	10.0	10.0	
	doF	OFF-delay	s	3	3	3	1	1	1	
	dEon	Suppression time	s	2	2	2	2	2	2	
	u5r	Number of phases		3Ph	3Ph		3Ph	3Ph	3Ph	
rocF 81r	rocF	Alarm on/off		oFF	oFF	oFF	oFF	oFF	oFF	oFF
	dFdt	**delta f / delta t**	Hz/s	0.800	0.800	0.800	2.000	2.000	2.000	1000
	PEr	periods		20	20	20	20	20	20	
	dAL	Response time	s	0.10	0.10	0.10	0.10	0.10	0.10	
	doF	OFF-delay	s	60	60	60	1	1	1	
rEL	trEL	response time Y1	s	5.0	5.0	oFF	5.0	5.0	5.0	
	don	Delay On	s	300	300	300	300	300	300	
nodE	nodE	Mode		rnAn	rnAn	rnAn	rnAn	rnAn	rnAn	
	dAL_	Response time(<</>>)	s	1.00	1.00	1.00	1.00	1.00	1.00	
	dAL_	Response time(<</>>)	s	4.00	4.00	4.00	4.00	4.00	4.00	
ddi	ddi	Display delay	s	0.5	0.5	0.5	0.5	0.5	0.5	
	dit	Display duration SCn	s	3.5	3.5	3.5	3.5	3.5	3.5	
Si	U	Voltage	V	230	400	230	230	400	100	
	F	Frequency	Hz	50.00	50.00	50.00	50.00	50.00	50.00	
	u5r	Vector shift	°	0.0	0.0	0.0	0.0	0.0	0.0	
CodE	Pin	Pincode		504	504	504	504	504	504	
InFo	Fnr	Firmware version		0-0d	0-0d	0-0d	0-0d	0-0d	0-0d	
	Snr	Serial number		xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	
	h	Operating hours	h	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	
	Err	Error counter		xxx	xxx	xxx	xxx	xxx	xxx	
	Pr	Program		1	2	3	4	5	6	

Display program: InFo → Pr or when switching on, **Display firmware version:** InFo → Fnr

= to be changed

First choose program 4 which is closest to your required settings!





Start in display mode (press ▶ for >2 s to reach display mode)

Press ▲ 1 time to reach **inFo**

Press ▶ five Times until **Pr** x is displayed

Press ▲ or ▼ until **Pr 4** is displayed (If Pr 4 is not available SPI1021 is old version, not suitable for DEWA application)

Press ▶ to confirm and **no** is displayed

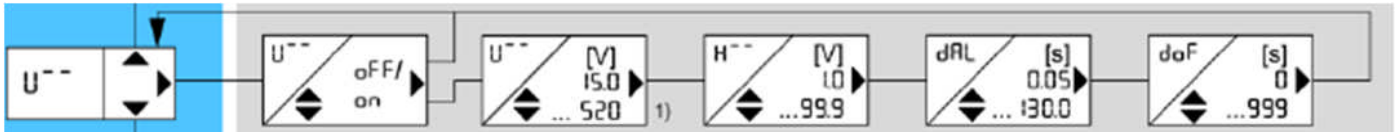
Press ▲ and **YES** is displayed

Confirm with ▶, **Pr 4** is blinking and decivce starts

Programming of Overvoltage U>>

U⁻⁻
59.S2
59>S2

Switch on (activate) U>> and change response time dAL to 0,20 s

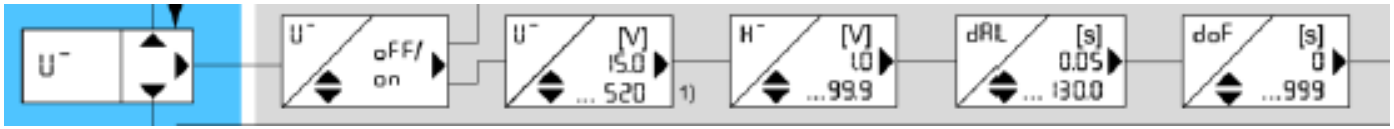


Start in display mode (press ▶ for >2s to reach display mode)
Press button ▼ several times until **U⁻ ⁻** is displayed
Press ▶ , **oFF** is displayed
Change with ▲ , **on** is displayed.
Press ▶ several times until **dAL** alternating with **0.10** is displayed.
Change with ▲ or ▼ until **0.20** is displayed.
Press ▶ several times until **U⁻ ⁻** is displayed again

Programming of Overvoltage U >

U⁻
59.S1
59>S1

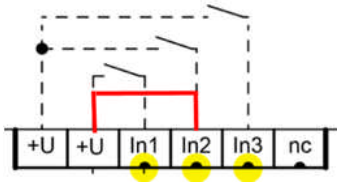
Change response time dAL to 90.0 s



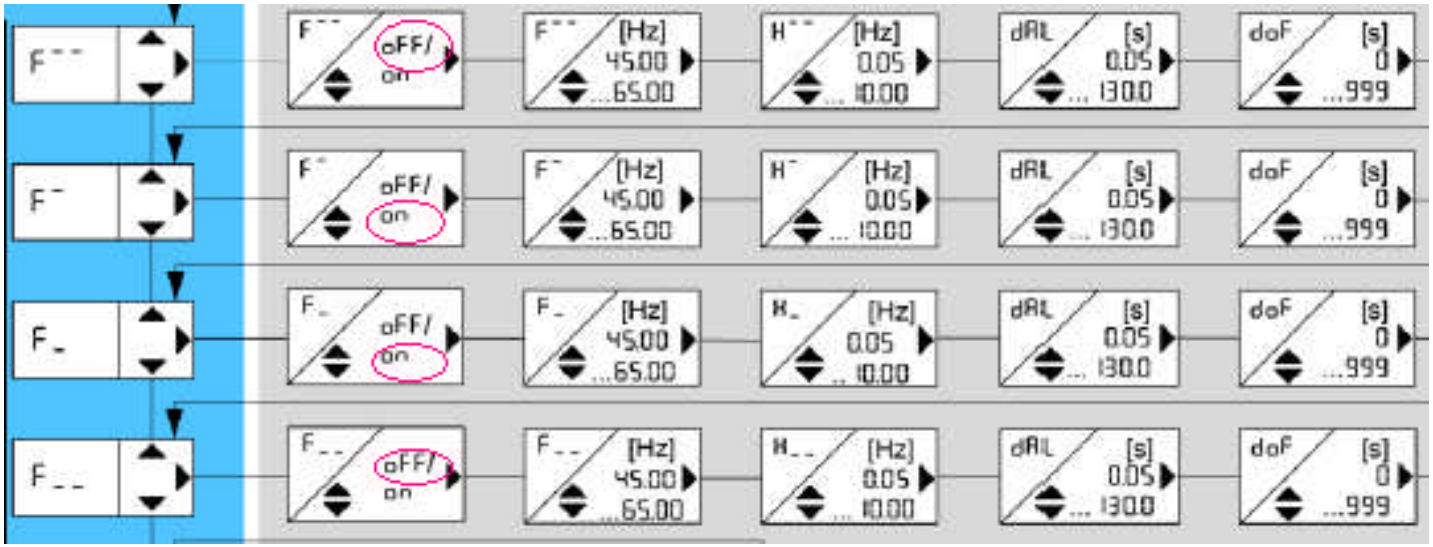
Start in display mode or U>> (press ▶ for >2 s to reach display mode)
Press button ▼ several times until **U ¯** is displayed
Press ▶ several times until **dAL** alternating with **0.20** is displayed.
Change with ▲ or ▼ until **90.0** is displayed.
Press ▶ several times until **U ¯** is displayed again.

Programming of
Frequency F >> , F >, F<< and F <

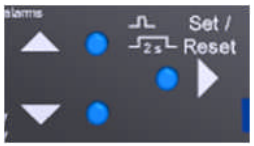
F⁻⁻	F⁻	F_	F__
81.S2	81.S1	81.S1	81.S2
81>S2	81>S1	81<S1	81<S2



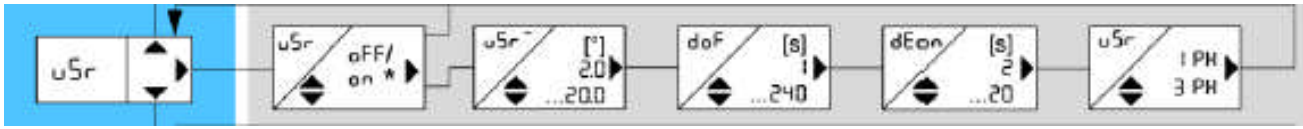
To switch off F>> and F<< and switch on F> and F<
insert a bridge between terminals: +U and In2 marked in red



Programming of uSr
Vector shift 78



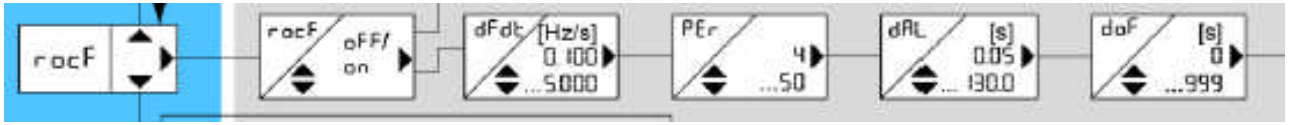
Switch on (activate) vector-shift



Start in display mode (press ▶ for >2 s to reach display mode)
Press button ▼ several times until **vSr** is displayed.
Press ▶ , **oFF** ist displayed.
Change with ▲ or ▼ until **on** is displayed.
Press ▶ to confirm
Press ▶ several times until **vSr** is displayed again

Programming of
ROCOF (**R**ate **O**f **C**hange **O**f **F**requency)

Switch on ROCOF, change parameters df/dt to 1.000 and switch off again



Start in display mode (press ▶ for >2 s to reach display mode)
Press button ▼ several times until **roCF** is displayed
Press ▶ , **oFF** ist displayed
Change with ▲ or ▼ until **on** is displayed.
Press ▶ several times until **dFdt** alternating with **2.000** is displayed.
Change with ▲ or ▼ until **1.000** is displayed.
Press ▶ several times until **roCF** is displayed again.
Press button ▶ , **on** is displayed
Change with ▲ or ▼ until **oFF** is displayed.
Press ▶ to confirm, **roCF** is displayed again

DEWA requires one of the following protections:
ROCOF **or** Vector Shift (VSR).
Prepare parameters of ROCOF and switch off again. Then it can be activated (and VSR switched off) easily when required

If required change other parameters accordingly.

Datasheet, complete operatings manuals, certificates and more you find on **www.ziehl.com**

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