Product Description / Applications
- Controller for humidification and dehumidify
- For single or network operation
- Connection to the Compound System VPR 5240-2
- 3 Humidity Sensor Inputs, 3 Relays, 2 Digital Inputs, Analog In-/Output 0-10V / 4-20mA
- Connection of Remote Displays of the TAA xx15 series

Standard Functions
- Dual Setpoint Control
- Control via Analogue Output
- Alarm Limits
- Day-/Night Operation
- Assignment to Compounds

ELREHA

ELEKTRONISCHE REGELUNGEN GMBH

Technical Manual   **5311437-04/01E**₂
Humidity Controller   from SoftwVers. **1.01**

Type: EVP 3260

In controllers which contain older software versions, some functions may not be available !

Operating / Operating Elements

increase values

decrease values

EVP

LED on = dehumidify
LED blinking = Min. idle time

LED on = humidification
LED blinking = Min. idle time

Programming Key

LED blinking = Alarm

The currently displayed setpoint is active

The current states of the digital inputs, the relays and the data transmission can be read on the Actual Values Page under L60 and L61.

LEDs ❄ ♨ ⚠ are blinking the same time = control functions are disabled by digital input or via interface.

3 keys allow programming the unit, all parameters will be displayed on the red LED-7-segment display. 3 red symbols at the right side indicate specific control functions (*not the relay states, these are displayed on the ‚Actual Page‘ !*).

With a requested relay output, but not elapsed min. idle time, the appropriate relay will not be activated.
The affiliated icon is blinking while min. idle is running.
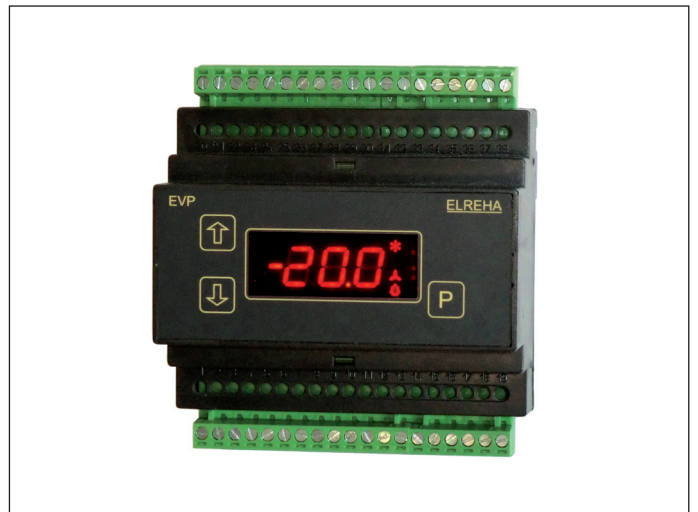
Programming

All parameters of the **EVP** are distributed on different pages.
While normal operation or if no key is pressed for about 3 minutes, the **EVP** displays the following information:

1st priority: ....current failure (blinking)
2nd priority: ....operating states (e.g. ‚oFF‘)
3rd priority: ....selected ‚permanent parameter‘ display

Selecting and Changing of Parameters

Key	Action
P (> 2 sec.)	Page name will be displayed
⇧⇩	Select desired page
P	Enter the page
⇧⇩	Select parameter
P	Prepare programming. Enter access code if necessary
⇧⇩	Change value. If you hold the key, the values change faster and faster
P	Confirm programming
P (> 2 sec.)	Page name will be displayed again

Access Protection

Except the temperature setpoints, parameters can be changed only after entering a correct access code. If you want to change such a parameter after pushing the „P"-key, then the following display appears:

| `C00` | Now the controller expects the entry of a code number. |

| `88` | This code number is always 88. Enter it by the up/down keys and confirm it by pressing „P" again. |

If no key is pushed for about 3 minutes, the code number must be entered again.

Parameter Pages

P > 2 sec.

1. Parameter on the:

[L] ⇒ P ⇒ L01   Actual Values Page

[r] ⇒ P ⇒ r01   Setpoint Page

[P] ⇒ P ⇒ P01   Mode Page

[h] ⇒ P ⇒ h01   Assignment Page
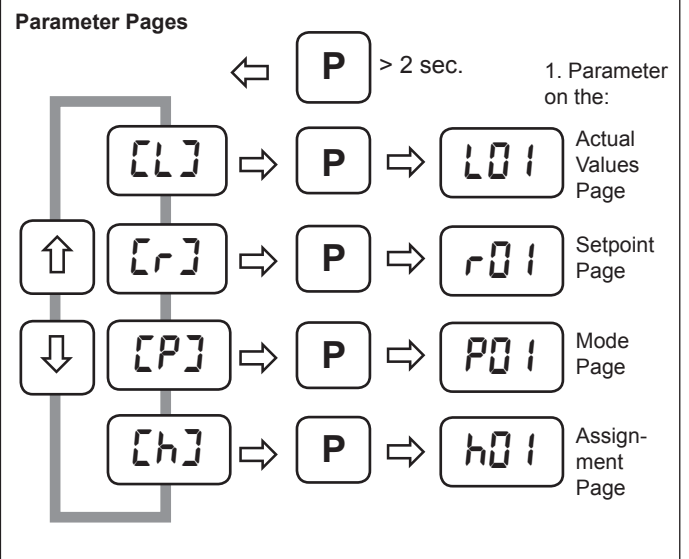
Please note safety instructions !

Technical Data

Supply Voltage...........................230V 50-60Hz, max. 9VA (controller only),
Ambient Temperature...0...+50°C
Max. Ambient Humidity ....85% r.H., not condensing

Inputs .... 3x Humidity Sensor: 1x 0...1000 Ohm, 1x 4...20mA, 1x 0...10V
Accuracy ....for the ambient temperature range 10..30°C
Standard signal inputs ±2%
0...1000 ohm input:
from 0-200 Ohm ±5% ,
from 200-500 Ohm ±2%,
from 500-1000 Ohm ±1%
Sensor broken from >= 1200 Ohm
Display Resolution....................................1% or 0,1% switchable
Digital Inputs ....2x 230V~, max. 3mA
overvoltage category II, pollution degree 2
Relay Outputs .... 1x SPDT, 2x SPST, isolated, 8A res/3A ind./250V
overvoltage category III, pollution degree 2

Voltage Supply for Humidity Sensor ....22V DC ±10%, 40 mA max.
Analogue Output........................... 0...10V or 4...20mA switchable
0...10 VDC, max. current typ. 1mA
4...20 mA, max. shunt resistance 250 ohms
Display/Parameter Ranges .... see parameter pages
Interfaces ....2x RS 485
Data Storage...unlimited
Real Time Clock ....automatic summer/winter switch,
10 days clock backup without mains voltage
Housing................plastic with foil keypad for rail mounting (DIN EN 50022),
screw terminals 2,5 mm²

Accessories

- Humidity Sensor **FF 2520** or from the series **FG xxx**
- PC-Software "**CV-Scheduler**"
- Remote Displays of the **TAA xx15** series.

CONNECTION INFORMATION & SAFETY INSTRUCTIONS

i Notice

The guarantee will lapse in case of damage caused by failure to comply with these operating instructions! We shall not be liable for any consequent loss! We do not accept liability for personal injury or damage to property caused by inadequate handling or non-observance of the safety instructions! The guarantee will lapse in such cases.

This manual contains additional safety instructions in the functional description. Please note them!

⚡ Danger

If you notice any damage, the product may <u>not</u> be connected to mains voltage! Danger of Life!
A riskless operation is impossible if:
• The device has visible damages or doesn't work
• After a long-time storage under unfavourable conditions
• The device is strongly draggled or wet
• After inadequate shipping conditions

• Never use this product in equipment or systems that are intended to be used under such circumstances that may affect human life. For applications requiring extremely high reliability, please contact the manufacturer first.

• **The product may only be used for the applications described on page 1.**

• **Electrical installation and putting into service must be done from qualified personnel.**

• **During installation and wiring never work when the electricity is not cut-off ! Danger of electric shock!**

• **Never operate unit without housing. Danger of electric shock!**

• **All 'PE' terminals must be connected to ground. Danger of electric shock!** Without PE the internal noise filter will not work, faulty indicated values may occur.

• Please note the safety instructions and standards of your place of installation!

⚠ Caution

• Before installation: Check the limits of the controller and the application (see tech. data). Check amongst others:
  - Make sure that all wiring has been made in accordance with the wiring diagram in this manual.
  - Supply voltage (is printed on the type label).
  - Environmental limits for temperature/humidity.
  - Maximum admitted current rate for the relays. Compare it with the peak start-up currents of the controlled loads (motors, heaters,etc.).
  Outside these limits malfunction or damages may occur.

• Sensor/probe cables must be shielded. Don't install them in parallel to high-current cables. Shielding must be connected to PE at the end close to the controller. If not, inductive interferences may occur.

• Please note for elongation: The wire gauge is not critical, but should have 0,5mm² as a minimum.

• Mounting the controller close to power relays is unfavourable. Strong electro-magnetic interference, malfunction may occur!

• Take care that the wiring of interface lines meets the necessary requirements.

i Notice

Cleaning
The use of a dry, lint-free cloth is sufficient to clean the product. Never use liquids or acidic fluids! Risk of damage!

Display of actual values and states

All actual values are shown on the "*Actual Values Page*" (ᴸᴸⱯ).

State of the Controller Unit
If the 4 status LEDs ❄ ♨ ♨ ♨ are blinking simultaneously and the display shows "oFF", the control functions are disabled by digital input or data interface.

Humidity Displays
"**L01, L05, L06**" (Actual Values Page) show the actual values of the humidity sensors 1, 5 and 6 in the range of 0...+100% r.H.. With "**P31, P35, P36**" (Mode Page) this displays can be calibrated.
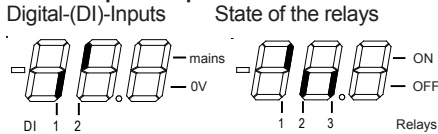
Setpoints
The active day or night setpoints are indicated by the left decimal point switched on.

Time Information
The Actual Values Page contains all runtime-/remaining time information, so the times up to the start of a function can be read.

State of inputs/outputs
Digital-(DI)-Inputs   State of the relays

Analogue Output: Parameter **L50**, value in %

Humidity Sensors from ELREHA
These types of Humidity Sensors can be used:
- **FF 2520**, output 0...10V or 4...20mA
- **FG xxx**, output 0...1000 ohms

The type of sensor can be set by '**h21, h25** and **h26**' (Assignment Page).

Remote Display
The connection of remote displays of the TAA xx15 series is possible. This displays are able to show optional the actual values of 'L01', 'L05' and 'L06'.

Error Messages / Error Memory / Error Codes

If a failure occurs, the controller will show parameter **L20** with a shortcut (see below) with a flashing display automatically. If multiple errors are present, they can be called up by the up/down keys. Always the last **15** error messages keep memorized with date and time of their appearance and can also be read-out via data interface.

----	........no error
ını	........the controller has been switched ON the first time or had data loss
hrd	......hardware failure
on	........mains voltage was switched ON (not a current but a historic failure)
oFF	......mains voltage was switched OFF (not a current but a historic failure)
t lb	......sensor X broken
t5b	......sensor X broken
t6b	......sensor X broken
t5c	......sensor X hot-wired
RHı	.......alarm dehumidify
RLo	......alarm humidification
Rdr	......network address assigned more than once
Ron	......Controller switch-on failure (not a current, but a historic failure)
RoF	......Controller switch-off failure (not a current, but a historic failure)
SEL	......Assignment failure

If a sensor is short or broken, a time delay of 5 seconds takes effect before an alarm will be activated.

Configuration Concept

The inputs/outputs of the EVP controller have no fixed tasks. The EVP works with a "**free configurable**" concept, this means that all available inputs and outputs (*relays, digital inputs, analogue output*) can be configured to work with any integrated control function or control circuit.
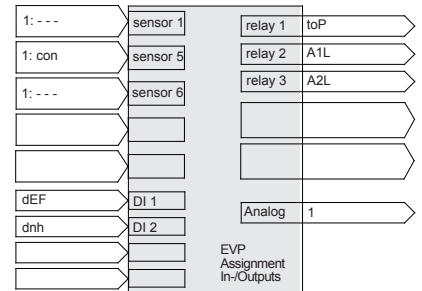
Digital Inputs (DI, Optocoupler inputs)
Each digital input can be assigned to one of the possible functions.

Relay Outputs
Each relay can be used to control one of the possible functions. The same function can even be assigned to multiple relays.

Parameter
Parameters of functions which are not assigned will not appear in the parameter pages to improve survey.

Assignment
The function of each input and output can be preset on the 'Assignment Page'. The assignment can be done by keys or via interface.

Configuration Example

ℹ Due to the free assignment, not all parameters are required.
All not required parameters will be fade out.

'Permanent Parameter' - Function

After power-up of the controller, the display will indicate the 'permanent parameter' after some seconds (or in case of a failure it will display the current failure). This can also be read if you don't touch a key for more than 3 minutes. Factory set is always the actual value of sensor 1.
If you think that it is suggestive to show any sensor value as permanent parameter, do the following:

Change permanent parameter

- Select the parameter you want to have as 'permanent parameter'
- Press '⇧' and '⇩' simultaneously.
  The display shows '*888*' for a moment, after that the selected parameter will be shown as the 'permanent parameter'.

Configuration of the controller

Hereby we use the example from above.

Action	Key	Display	Remarks
enter page listing	"**P**"	(A)	hold key for > 2 seconds
select assignment page	"⇧⇩"	(h)	
enter asssignment page	"**P**"	h01	h01 is the 1st parameter on the page and determines the function of relay 1
displaying the function of relay 1	"**P**"	any	
new assignment of relay 1	"**P**"	C00	(Code expected) only if no key key is hit for about 3 minutes
enter access code	"⇧"	C88	
confirm	"**P**"	any	
select function	"⇧⇩"	toP	toP = control output dehumidify
confirm	"**P**"	h01	parameter # will be displayed again
select new in-/output	"⇧⇩"	h02	determines the function of relay 2
displaying the function of relay 2	"**P**"	any	
new assignment of relay 2	"**P**"	any	
select function	"⇧⇩"	A1L	A1L=alarm relay passive
confirm	"**P**"	h02	parameter # will be displayed again

Repeat this steps until all inputs and outputs are assigned to the desired functions.

Parameter Pages

Actual Values Page [L]

Param.	Disp	Note	Range	Factory Setting
L01	X	Actual humidity value at sensor 1	0...+100% r.H.	---
		(All inputs are correctable in the mode page, functions are selected in the assignement page)		
L05	X	Actual humidity value at sensor 5	0...+100% r.H.	---
L06	X	Actual humidity value at sensor 6	0...+100% r.H.	---
L20	X	Current Failure		---
L36	X	Remaining min. idle time dehumidify	minutes	
L37	X	Remaining min. idle time humidification	minutes	
L41	X	Dehumidify control (0 = off, 1 = on, oFF = switched off from the VPR)	0, 1, oFF	
L43	X	Day/Night Mode (0 = day, 1 = night)	0, 1	
L44	X	Operation state of the controller	on, oFF	
L50	X	Current value of the analogue output in X% of the selected range	0-100%	
L60	X	States of the digital inputs DI 1 and DI 2		
L61	X	States of the relays 1-3		

ℹ️ Parameters marked by "**Disp**" are for information only and cannot be changed.

Setpoint Page [r]

ℹ️ Notice — If this point is ON while displaying a parameter number, the parameter is active at present

Param.	Note	Range	Factory Setting
r01	Day setpoint dehumidify	0,0...100,0 %	70,0 %
r02	Day setpoint humidification	0,0...100,0 %	50,0 %
r03	Day alarm limit dehumidify	0,0...100,0 %	100,0 %
r04	Day alarm limit humidification	0,0...100,0 %	0,0 %
r11	Night setpoint dehumidify	0,0...100,0 %	70,0 %
r12	Night setpoint humidification	0,0...100,0 %	50,0 %
r13	Night alarm limit dehumidify	0,0...100,0 %	100,0 %
r14	Night alarm limit humidification	0,0...100,0 %	0,0 %
r21	Hysteresis dehumidify	0,1...20,0 %	5,0 %
r22	Hysteresis humidification	0,1...20,0 %	5,0 %
r31	Alarm delay dehumidify	0...120 min.	45 min.
r32	Alarm delay humidification	0...120 min.	45 min.
r51	Min. idle time dehumidify	0...30 min.	0 min.
r52	Min. idle time humidification	0...30 min.	0 min.
r61	PI - setpoint day	0,1...100,0 %	50,0 %
r62	PI - setpoint night	0,1...100,0 %	50,0 %
r63	PI - proportional range	0,1...30,0 %	5,0 %
r64	PI - delay time	oFF, 1...600 sec.	10 sec.
r71	PI analogue output, output delay	0...240 sec.	0 sec.
r72	PI analogue output, step width	1...100%	100%
r73	Pulse duration for relay humidification/dehumidify	1...240 sec	1 sec.
r74	Switch on time pulse/relay humidification/dehumidify	1...240 sec.	240 sec.

ℹ️ Due to the free assignment, not all parameters are required.
All not required parameters will be fade out.

Mode Page [P]

Param.	Note	Range	Factory Setting
P01	Assigned to compound no. (0 = not assigned)	0, 1, 2, 3	0
P21	Night operation ON at (In 10 min. steps)	00.0 ... 23.5, oFF	oFF
P22	Night operation OFF at (In 10 min. steps)	00.0 ... 23.5, oFF	oFF
P31	Calibration of humidity sensor 1	+/- 20,0 % adjustable	0,0 %
P35	Calibration of humidity sensor 5	+/- 20,0 % adjustable	0,0 %
P36	Calibration of humidity sensor 6	+/- 20,0 % adjustable	0,0 %
P41	Actual value display resolution	0 = 1%, 1 = 0,1%	1
P51	Analogue output delivers 0V resp. 4mA if control sensor temp.=	0,0...100,0 %	0,0 %
P52	Analogue output delivers 10V resp. 20mA if contr. sens. temp. =	0,0...100,0 %	100,0 %
P70	Standard of summer/winter switch	0 = oFF, 1 = EU, 2 = tun (variable)	1
P71	Time Zone Offset	-720...720 min.	60 min.
P72	SummerON Month	(only for tun) 1...12	3
P73	SummerON Day	(only for tun) 0(Sund.)...6	0
P74	SummerON x-Day	(only for tun) 0...5(last), 0 = off	5
P75	SummerON Hour	(only for tun) 0...23	2
P76	SummerOFF Month	(only for tun) 1...12	10
P77	SummerOFF Day	(only for tun) 0(Sund.)...6	0
P78	SummerOFF x-Day	(only for tun) 0...5(last), 0 = off	5
P79	SummerOFF Hour	(only for tun) 0...23	3
P80, P81	Year, Month		
P82, P83	Day, Hour		
P84, P85	Minute, Second		
P87	Software version		
P89	Data transmission speed (Baudrate)	12(00)...115(00)	96(00)
P90	Address of the controller unit in a network	0 - 78	78

Assignment Page ⌐h⌐

Param.		Note	Range	Fact. Setting
h0 1		Function of relay 1	---	ALL
			on = continuous on	
			ALL = alarm passive	
			ALH = alarm active	
			toP = dehumidify	
			bot = humidification	
h02		Function of relay 2	ditto.	toP
h03		Function of relay 3	ditto.	bot
h2 1		Sensor function 1	--- = off, con = control sensor (0...1000 Ohm)	---
h25		Sensor function 5	--- = off, con = control sensor (4...20mA)	con
h26		Sensor function 6	--- = off, con = control sensor (0...10V)	---
h3 1		Function of digital input (DI) 1	--- = off,	---
			dnL = night operation (active low),	
			dnH = night operation (active high)	
			oFL = unit oFF (active low),	
			oFH = unit oFF (active high)	
			toL = dehumidifiy oFF (active low),	
			toH = dehumidifiy oFF (active high)	
			boL = humidification oFF (active low),	
			boH = humidification oFF (active high)	
			PiL = PI control oFF (active low)	
			PiH = PI control oFF (active high)	
h32		Function of digital input (DI) 2	ditto.	---
h40		Analogue output delivers	420 = current 4-20mA, 0 10 = voltage 0-10V	420
h4 1		Analogue output works as/delivers	--- = 0V / 4 mA.	---
			100 = 100% (10V bzw. 20 mA),	
			di5 = actual value image	
			dii = actual value image, inverted	
			Pt_ = PI controller dehumidify, at oFF 0%	
			Pt⁻ = PI controller dehumidify, at oFF 100%	
			Pb_ = PI controller humidification, at oFF 0%	
			Pb⁻ = PI controller humidification, at oFF 100%	

Functions

Control via Dual Setpoint Controller

The EVP 3260 is a Dual Setpoint Controller for humidity with an upper setpoint for dehumidify and a lower setpoint for humidification, each with an own hysteresis.

Switching points:
Dehumidify
Switching point   Actual value ≥ Setpoint dehumidify + Hysteresis dehumidify
Off point   Actual value < Setpoint dehumidify
Humidification
Off point   Actual value > Setpoint humidification
Switching point   Actual value ≤ Setpoint humidification - Hysteresis humidif.
The setpoint 'Setpoint dehumidify' is used for cooling resp. dehumidification, the setpoint 'Setpoint humidification' is used for heating resp. humidification.

Info — Setpoints and hysteresis can be set in the way, that the switch-on points can never not be reached possibly.
To draw attention to this critical attitude, at this conditions an assigment failure appears:
Setpoint dehumidify + Hysteresis dehumidify > 100,0%
Setpoint humidification - Hysteresis humidification < 0,0%

Control via Analogue Output

To the analogue output the actuating variable of a PI controller with 'dead time compensation' can be switched. The necessary parameters (setpoint, proportional range, delay time, interval, step-width) are working independent from the dual setpoint controller.

Alarm Limits

Absolute alarm limits 'alarm limit dehumidify' and 'alarm limits humidification' are available. The hysteresis for them is fixed to 1,0% and can not be adjusted. At dehumidify the hysteresis is below and at humidification above the alarm setpoint:
Alarm dehumidify ON: Actual value > Alarm limit dehumidify
Alarm dehumidify OFF: Actual value ≤ Alarm limit dehumidify - 1,0%
                           (but min. 0,0%)
Alarm humidification OFF: Actual value ≥ Alarm limit humidification + 1,0%
                           (but max. 100,0%)
Alarm humidification ON: Actual value < Alarm limit humidification

The parameter 'Alarm delay dehumidify' is deactivated, if the alarm limit is set to 100,0%. The parameter 'Alarm delay humidification' is deactivated if the alarm limit is set to 0,0%.
For both alarm setpoints an individual alarm delay is available. The alarms have no influence on the control function.

Night Operation

For a night operation a second setpoint set for setpoints and alarm limits is available. The hysteresis 'Hysteresis dehumidify' and 'Hysteresis humidification' will be shared for day/night operation.

Current Failures

The following current failures are possible:
1. Sensor failure
2. Assignment failure
3. Hardware failure
4. Alarm dehumidify and alarm humidification

The failure messages of the failures after 1-3 appear after a fixed delay in a second range.
The failure messages of the failures after 4 appear after the set alarm delay time. All current failures can be read at the parameter 'Current Failure' and can also retrieved via the data interface. If a failure appears, the display shows the current failure and starts flashing.

Assignment Failure

In the following cases an assignment failure will be released:
▪ Alarm limit dehumidify < Setpoint dehumidify + Hysteresis dehumidify
▪ Alarm limit humidification > Setp. humidification - Hysteresis humidification
▪ Night alarm limit dehumidify < Night setp. dehum. + Hysteresis dehumidify
▪ Night alarm limit humidification > Night setp. hum. - Hysteresis humidification
▪ Setpoint dehumidify ≤ Setpoint humidification
▪ Night setpoint dehumidify ≤ Night setpoint humidification
▪ Setpoint dehumidify + Hysteresis dehumidify > 100,0%
▪ Setpoint humidification - Hysteresis humidification < 0,0%
▪ Non supported / faulty ressource assignments

Historic Failures

Always the last 15 failure messages will be stored in the controller. This historic messages are accessible only via the interface.

Compound Functions

If the EVP is connected to a compound system, it can be assigned to compound 1, 2, 3 or no compound.
If a compound assignment is set, the function 'control dehumidify' can be switched oFF by the VPR-System with a plant failure or for 'Low Power Optimization' of the corresponding compound.
However, the 'setpoint humidification' can only be switched off with a set compound assignment and with a plant failure of the compound.

Sensors and Sensor Corrections

Entered correction values will be added to the actual values and limited to the valid range of values within 0,0%…100,0%.
If actual value + correction < 0,0%   →   0,0%
If actual value + correction >100,0% →   100,0%

Interface / Data Connection

All actual values and parameters of the unit can be read and adjusted via the data interface. Independently from the display resolution % values will be transmitted as 0.1% values.

Remote Display

At the EVP 3160, the connection of remote displays of the series TAA xx15 is possible. This displays are able to display optionally the actual values '**L01**', '**L05**' and '**L06**'.
The connection at the controller can be done exclusively via the RS-485 interface at the terminals 20 and 21.
Multiple TAA xx15 can be connected via this interface, in this case each display is able to display the same or different actual values.
At the EVP not settings are necessary. The selection of the actual values must be done via the address switch at the remote display, address 1, 5 and 6 for the parameters L01, L05 and L06.
The values on the remote display appear with the same resolution as at the EVP.

Real Time Clock

The built-in real time clock has a buffer for max. 10 days without mains voltage. Date and time can be set by "**P80**"..."**P85**" (Mode Page).
By default, a GMT +01:00 is set ("Time Zone Offset" = 60 min.), which is standard for the Central European Space. If the product is used in other countries, this value can be changed.

Summer/Winter Switch - Time Zones
An automatic summer/winter switch "**P70** = EU" (Mode Page) considers the current EU-rules from 1996 (EU 96), but can also be switched off or set as needed.

Variable Time Zones
The function for Variable Time Zones can be activated by "**P70** = tun" and is adaptable by the parameters "**P72**"..."**P79**".

P72 *(SummerON Month)* (Fact.Setting March, 3rd)
  The month of the beginning of the summertime
P73 *(SummerON Day)* ...(Fact.Setting. 0, sunday)
  The weekday of the beginning of the summert.
P74 *(SummerON x-Day)* ...(Fact.S. 5, last sunday)
  The x-th with "*SummerON Day*" preset day of .. the month
P75 *(SummerON Hour)* ..... (Fact.Set. 2, 2 o'clock)
  The hour of the beginning of the summertime

P76 *(SummerOFF Month)*(Fact.Set. October, 10th.)
  The month of the end of the summertime
P77 *(SummerOFF Day)* ...(Fact.Setting 0, sunday)
  The weekday of the end of the summertime
P78 *(SummerOFF x-Day)* ..(Fact.S. 5, last sunday)
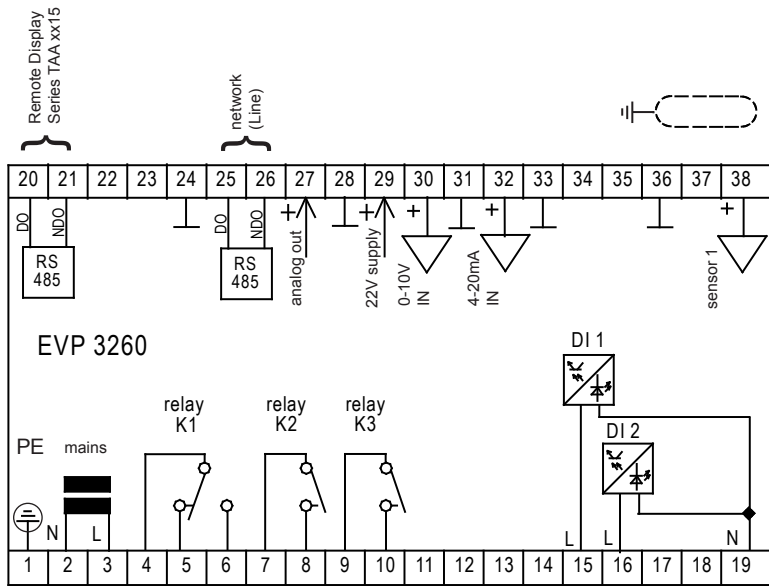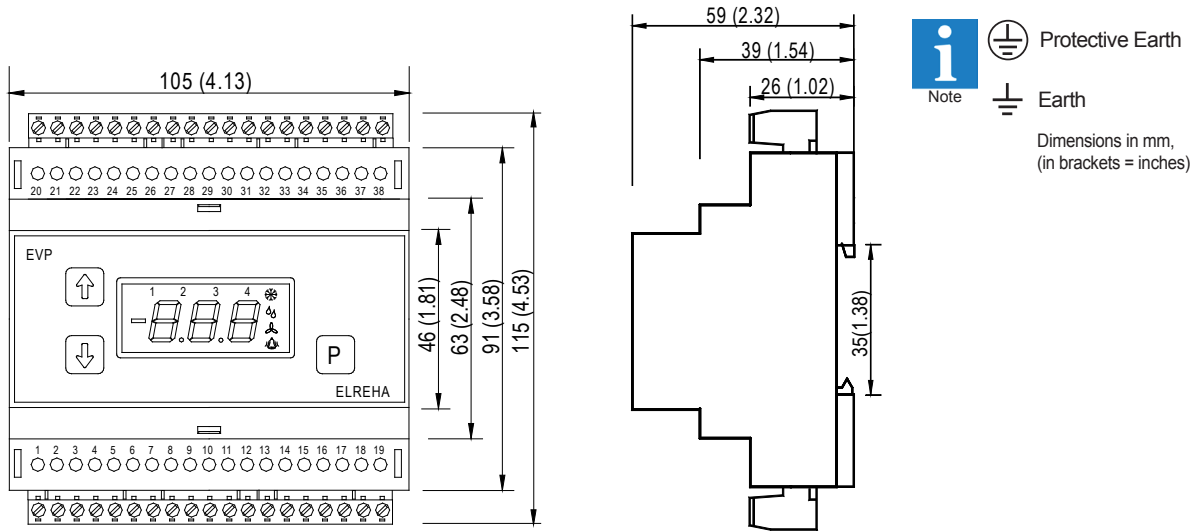 The x-th with "*SommerOFF Day*" preset day of the month
P79 *(SummerOFF Hour)*.. (Fact. Set. 3, 3 o'clock)
  The hour of the end of the summertime

The shift to the summer resp. winter time is set by the time setting which is active at this time.

Dimensions & Connection

105 (4.13)

59 (2.32)
39 (1.54)
26 (1.02)

46 (1.81)
63 (2.48)
91 (3.58)
115 (4.53)

35 (1.38)

i Note

⏚ Protective Earth

⏚ Earth

Dimensions in mm,
(in brackets = inches)

EVP

1 2 3 4

P

ELREHA

20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

Remote Display
Series TAA.xx15

network
(Line)

20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
DO	NDO			⊥	DO	NDO	+	⊥	+	+	⊥	+	⊥		⊥			+

RS 485   RS 485   analog out   22V supply   0-10V IN   4-20mA IN   sensor 1

EVP 3260

relay K1   relay K2   relay K3

DI 1

DI 2

PE   mains

N   L   L   L   N

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

⚠ **When connecting the switch outputs, the overvoltage category must be respected !**

EG-Conformity

CE

For all described products there is a declaration of conformity which describes that, when operated in accordance with the technical manual, the criteria have been met that are outlined in the guidelines of the council for alignment of statutory orders of the member states on EMC-Directive (2004/108/EC) and the Low Voltage Directive (LVD 2006/95/EC). This declarations are valid for those products covered by the technical manual which itself is part of the declaration. To meet the requirements, the currently valid versions of the relevant standards have been used.
Following standards (newest editions) were consulted for the conformity testing to meet the requirements of EMC and Low Voltage Guidelines:

EN 61010 - Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte
EN 61326 - Elektrische Betriebsmittel für Leittechnik und Laboreinsatz - EMV Anforderungen

This statement is made from the manufacturer / importer   *by:*

ELREHA Elektronische Regelungen GmbH
D-68766 Hockenheim

www.elreha.de

(*name / adress*)

Werner Roemer, *Technical Director*

Hockenheim............**17.6.2015**..............................

city   *date*   *sign*

i This manual, which is part of the product, has been set up with care and our best knowledge, but mistakes are still possible. Technical details can be changed without notice, especially the software. Please note that the described functions are only valid for units containing the software with the version-number shown on page 1 of this manual. Units with an other version number may work a little bit different.

set up: 3.8.15, tkd/jr	checked: 7.10.15, ek/jk	approved: 7.10.15, mkt/mh	transl.(E):	transl.(F):	corr: 11.12.15, tkd/jr