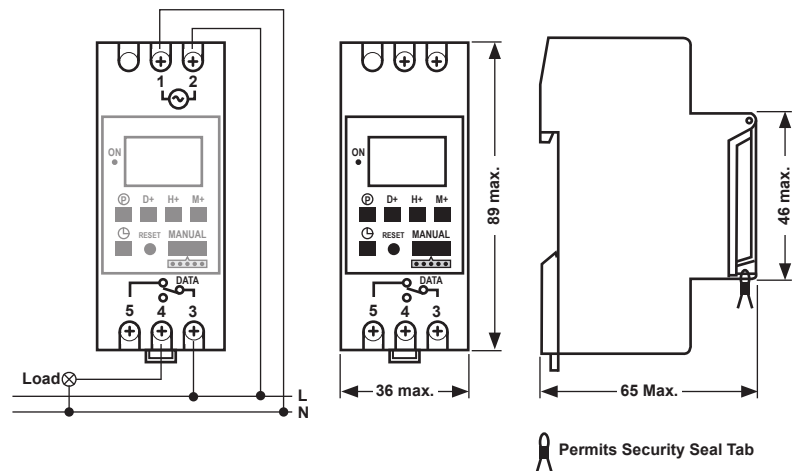- Up to 20 on-off or 38 pulse programmes (including weekly cycle, daily cycle and manual on-off control)
- Countdown function - time range setting within 1 sec. to 99min. 59sec.
- Daylight saving manual adjustment
- Integral lithium battery backup in case of power failure
- Designed for use with TS35 DIN Rail
- Viewable accumulated operating time and action number
- Copy function via Data Card Interface

Technical Data

Rated Operating Voltage:		85-265VAC
Frequency Range:		50-60Hz
Number of On-Off Programmes:		20: minimum 1 min.
Number of Pulsation Programmes:		38: 1sec. - 59min. 59sec.
Contact Load Capacity:	Resistive Load	20A / 250V AC COS φ=1
	Inductive Load	12A / 250V AC COS φ=0.6
	Energy Saving Lamp	170W
	LED Lamp <2W	30W
	LED Lamp 2-8W	100W
	LED Lamp >8W	120W
Countdown Time:		1 sec. to 99min. 59sec.
Timing Error:		≤ ±2sec. / day (25°C)
Power failure memory:		3 years
Contact Form:		1 group conversion
Stand-by Consumed Power:		≤1.5VA
Relay Pull Power:		≤5VA
Electrical Life:		10^5 times
Mechanical Life:		10^7 times
Operational Temperature:		-10 to +50°C (non-icing)
Ambient Humidity:		35 to 85% RH
Storage Temperature:		-10 to +60°C
Weight:		Approx. 150g

Wiring Diagram & External Dimensions (mm)

Instructions for Use

At the first time of using, or in order to clear any existing settings, press "RESET". By pressing "D+" and "H+" at the same time for 3 seconds, the product will switch off and all previous settings will be lost, with the exception of day correction paramemters, accumulated operating times and action times, which are all retained by the unit.

Please note that the unit includes an automatic keylock. During the setting process, 30 seconds of inactivity will result in the keys locking, with the current parameters being saved. To unlock, press ⏱ four times. To lock, press ⏱ 4 times again.

1. Setting the display time (current time)

Step	Button	Programming
1	Hold ⏱ and then press **H+**	HOUR increases on the screen. To increase hours further, continue pressing **H+**
2	Hold ⏱ and then press **M+**	MINUTE increases on the screen. To increase minutes further, continue pressing **M+**
3	Hold ⏱ and then press **D+**	Indicator for DAY of week moves on the screen. To change the week selected, continue pressing **D+**

NOTE: The timer operates on a 24 hour system when initially turned on. Hold " ⏱ " for 5 seconds to convert to 12 hour system with "AM" displayed on the upper left corner. Hold " ⏱ " for 5 seconds again to revert back to 24 hour system. "AM" does not display in 24 hour system.

2. Timing Settings

2.1 20 Group Settings of ON/OFF Function

Step	Button	Programming
1	Press Ⓟ	To enter programming ON mode (displays 1 ON)
2	Press **H+** & **M+**	To set the ON time, press **H+** to set the hour, and press **M+** to set the minute
3	Press **D+**	To select the day settings: MO-FR; MO-SA; SA-SU; MO-WE; TH-SA; MO WE FR; TU TH SA If the same time is required on every day, do not press **D+**, and skip this step instead
4	Press Ⓟ	To enter programming OFF mode (displays 1 OFF)
5	Press **H+** & **M+**	To set the OFF time, press **H+** to set the hour, and press **M+** to set the minute
6	Press **D+**	To select the day settings: MO-FR; MO-SA; SA-SU; MO-WE; TH-SA; MO WE FR; TU TH SA If the same time is required on every day, do not press **D+**, and skip this step instead
7	Repeat steps 1-6	Set the ON/OFF time for 2nd to 20th groups, or press ⏱ to exit programming mode

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www.stag-electrical.com

a: The ON/OFF program group can not overlap another time setting.
b: When the programming is complete, press ℗ to view the set number of ON/OFF groups and the On and Off timings. To modify, follow the steps mentioned above.
c: Press ℗ to enter the ON/OFF programming mode. Press MANUAL to clear the ON or OFF time of the current group, which will then display "--:--"

2.2 38 Pulsation Function Settings

Step	Button	Programming
1	Press & hold **H+** & **M+** for 3 secs.	To enter pulse width programming mode (displays 0:00 and "⊓")
2	Press **H+**, **M+** & ⊕ at same time	To set the pulse width: min / sec (max. 59 mins. 59 secs)
3	Press ⊕ and **MANUAL**	To complete the pulse width setting. "⊓" flashes on the screen
4	Press ℗	To enter pulsation timing programming ON mode (displays 1 ON). Press again for second pulse time
5	Press **H+** & **M+**	To set the ON time, press **H+** to set the hour, and press **M+** to set the minute
6	Press **D+**	To select the day settings: MO-FR; MO-SA; SA-SU; MO-WE; TH-SA; MO WE FR; TU TH SA If the same time is required on every day, do not press **D+**, and skip this step instead
7	Repeat steps 4-6	Set the pulsation time of the 2nd to 20th groups, or press ⊕ to exit programming mode
8	Press ⊕	To complete the setting. "⊓" flashes on the screen
	Press both **H+** & **M+**	To exit the pulsation programming mode. The "⊓" will not display on the screen.

2.3 Countdown Function Settings

Step	Button	Programming
1	Press & hold ℗ & ⊕ for 2 secs.	To enter countdown programming mode (displays 0:00 and "**d**" in bottom left corner)
2	Press **H+**, **M+** & ⊕ at same time	To set the minutes & seconds of countdown respectively (duration range: 1sec. to 99mins. 59secs.)
3	Press **MANUAL**	Start the countdown function
4	Press ℗	Halfway reset and wait to restart the countdown again
5	Press & hold ℗ & ⊕ for 3 secs.	To exit the countdown programming mode. The "**d**" no longer displays on the screen.

3. Manual Daylight Saving Time (DST) Time Settings

Step	Button	Programming
Setting	Hold **D+** and **M+** for 3 secs.	The current displayed time will increase by 1 hour ("1h" will display at bottom left corner of screen)
Cancel	Hold **D+** and **M+** for 3 secs. again	DST will be cancelled and time will revert back one hour

NOTE: This setting will only affect the current displayed time. The ON/OFF timing program or pulsation remains unchanged. If the ON/OFF program needs to run according to DST, set it in the initial programming mode.

4. Automatic Correction of Daily Time Error

Step	Button	Programming
1	Press both **MANUAL** & ℗	To enter Time Correction screen, and will display: 1d-00 (range setting: -3 to +3 secs)
2	Press **D+**	Set the number of seconds required for daily compensation. Increases or decreases in 1 second intervals
3	Press ⊕	To save setting and exit Time Correction screen

5. Control ON or OFF Manually - PRESS "MANUAL"

Screen Display		Work State	Screen Display	Work State
ON	AUTO	Automatic control in the ON state	ON	Permanent ON and not controlled by timer
AUTO	OFF	Automatic control in the OFF state	OFF	Permanent OFF and not controlled by timer

6. Check Accumulated Operating Times & Action Number

a: Hold ⊕ and **MANUAL** to display the operating time (h) and the action number (p) circularly.
   To calculate the actual operating time and action number, multiply the displayed values by 10 (max. 99990h & 99990t).
   For example: "h0013" and "p0021" refer to accumulated operating time of 130 hours and an action number of 210 times.
b: Release **M+** and **MANUAL** to return to the clock interface.

7. Copy Data Function

Ideal for use where a large amount of ON/OFF and/or pulsation groups have been programmed. By using the dedicated Timer Data Card, it is possible to quickly copy data from the timer, to another similar timer.

a: Set up and program your SDTC-20-1C timer, including real time, clock display mode etc.
b: Insert the dedicated data card into the timer port of the timer that has been set up
c: Press the READ/WRITE button on the data card until "OUT" is displayed on the timer's screen. Then press OK on the data card to start data export. After export has been successful, "O" will be displayed.
d: Insert the data card into the timer you want to copy data to.
e: Press the READ/WRITE button on the data card until "IN" is displayed on the timer's screen. Then press OK on the data card to start data import. After import has been successful, "O" will be displayed.
f: Repeat steps d and e to write data to additional timers.

If the LCD screen displays "N" during the writing process, this signifies a failure to export/import. In this even, please check the data card is correctly inserted into the timer, and that the timer switch is turned on. Once done, repeat process.

Press "RST" button on the data card to clear all data on the data card.

PLEASE NOTE:

• Please do not use in environment where the product will come into direct contact with dust, corrosive gas, direct sunlight or rain.

• Please store product and use within the conditions of rated voltage, within the specified temperature and humidity ranges.