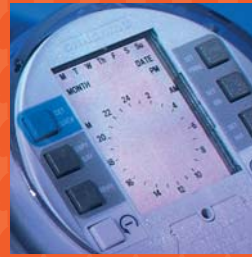




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Product Catalogue



SANGAMO
switched  on solutions

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introduction

s w i t c h e d  o n s o l u t i o n s

Sangamo round pattern time switches are renowned for their quality and reliability as well as ease of setting, installation and replacement, characteristics which make them the installer's switch of choice for a wide range of lighting and other electrical systems control applications.

Established over 50 years ago, Sangamo combines a well-rounded track record with customer focus and the fresh dynamism of an independent company under new management.

As UK market leader and worldwide exporter, Sangamo has passed the milestone of manufacturing 8 million round pattern switches, some of which are still working reliably in their original applications after 40 years service.

Installers, contractors, specifiers and local authorities opt for the longevity of Sangamo round pattern time switches for an array of control applications including security, stairwell, shop window, signage and street lighting, as well as heating system and air ventilation.

Sangamo produces two basic types of time switches – standard and solar – in three different product groups: the S250 series with 24-hour electro-mechanical operation, the 24-hour quartz-controlled electro-mechanical Q550 series with battery reserve and the seven-day electronic E850 series with battery reserve.

To find out more about the product to meet your specification, contact your local electrical wholesaler, control distributor or lighting specialist or get in touch with Sangamo direct at:

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Tel: 01475 745131 Fax: 01475 744567
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round pattern time switches

Round Pattern Time Switches

are renowned for their simplicity and ease of use in industrial and commercial installations.

They consist of two basic types: Standard and Solar models.

Round Pattern products are unique in that all models have a 20 amp switching capability allowing the products to be utilised in many heavy duty applications where the use of contactors cannot be warranted.

To cater for a wide variety of applications, the range of Round Pattern Time Switches includes three distinct groups, each with its own unique characteristics.

Reliable

Sangamo Round Pattern Time Switches are supremely reliable; proven in millions of installations, they are true fit-and-forget switches which will provide many years of maintenance free operation. The switches are built to the highest standards - both the S250 and Q550 are guaranteed for five years (applies to UK and Southern Ireland only), and the E850 guaranteed for three years. All models have BEAB approval and the company operates to a quality system approved by BSI against BS EN ISO 9001.

Versatility

The choice of basic models, with a wide selection of configuration options and generous 20 amp switching capability, means that Round Pattern Switches are available to suit most general purpose a.c. applications. The 24 hour models are ideal for simple fixed daily switching cycles, with a choice of battery maintained quartz control where it is important to guarantee continuity of timing. Solar dial versions provide automatic compensation for sunrise/sunset time variation. For more complex switching operations, the sophisticated electronic models provide full programmability up to seven days.

Whichever Round Pattern model suits your application, it will provide the same convenience, reliability and value for money so familiar to Sangamo customers.

S250 Series

24 hour quartz controlled without battery reserve. Solar dial versions are available. (See pages four and five)



Q550 Series

24 hour quartz controlled with battery reserve. Solar dial versions available. (See pages four and five)



E850 Series

Flexible, seven day, fully programmable electronic control with battery reserve. Allows up to 48 ON and 48 OFF operations per day.



24 Hour Switches

All have a 24 hour programming cycle and perform the same sequence of switching operations on each day.

Both series offer similar facilities, but the Q550 models include a reserve battery which will maintain timing operation for up to 100 hours in the event of a mains power failure. This feature is particularly useful where large numbers of switches are involved, eliminating the considerable trouble and expense of resetting after a power cut.

All 24 hour switches can be quickly and easily programmed using small manual levers on their dials. Depending on the model chosen, up to three ON and three OFF (or six changeover) operations per day are possible and the switches will normally perform the same sequence every day. However the unique "day omission" device can select any number of days in the week on which the switching cycle will be disabled. Several of the Q550 models also allow a selected operation in the programmed cycle to be brought forward on one day in the week.

Day Omission

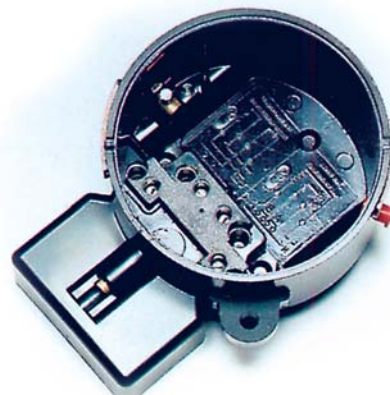
Most models omit ON operations on the selected days, but models omitting OFF operations are available.

Early Operation - 24 Hour Models Only

Available only on some Q550 models. The day for early switching is determined by the positioning of an "early" lever. This is particularly suitable for early ON/OFF operations within retail premises.

Seven Day

The E850 series is a range of seven-day switches which allow the added flexibility of up to 48 ON and 48 OFF (or 96 operations per day) and automatically allows for changes between British Summer Time and Greenwich Mean Time.





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round pattern solar models

Solar Time Switches

are ideal for any application which requires control linked to sunset and sunrise times. Popular applications for solar time switches include street, stairwell and security lighting.

Cost Savings

Once set, the switches track sunset and sunrise throughout the year, without the need to sense light levels. This avoids the installation and maintenance problems associated with photosensing models and means they can be left to operate unattended for years.



S250 and Q550 Solar Models

Two standard versions of each solar dial switch are available with different operating options. The simpler version, known as Form 13, gives one ON and one OFF operation per day. The ON operation always tracks sunset while the OFF operation can be made either to track sunrise, or to occur at a fixed time between 8.30pm and 1.00am.

Form 14 has one ON and one OFF operation which track sunset and sunrise times respectively and has the added facility of allowing you to select a fixed OFF operation between 8.30pm and 1.00am, and a fixed ON operation between 3.15am and 8.30am.



S250 Solar



Q550 Solar



Because the times of sunrise and sunset vary with latitude, four standard dials are available for use in the UK each corresponding to a geographical zone. (See diagram below).

Other dials are available on request for applications outside the British Isles. Adjustments may be made to accommodate longitudinal variations.

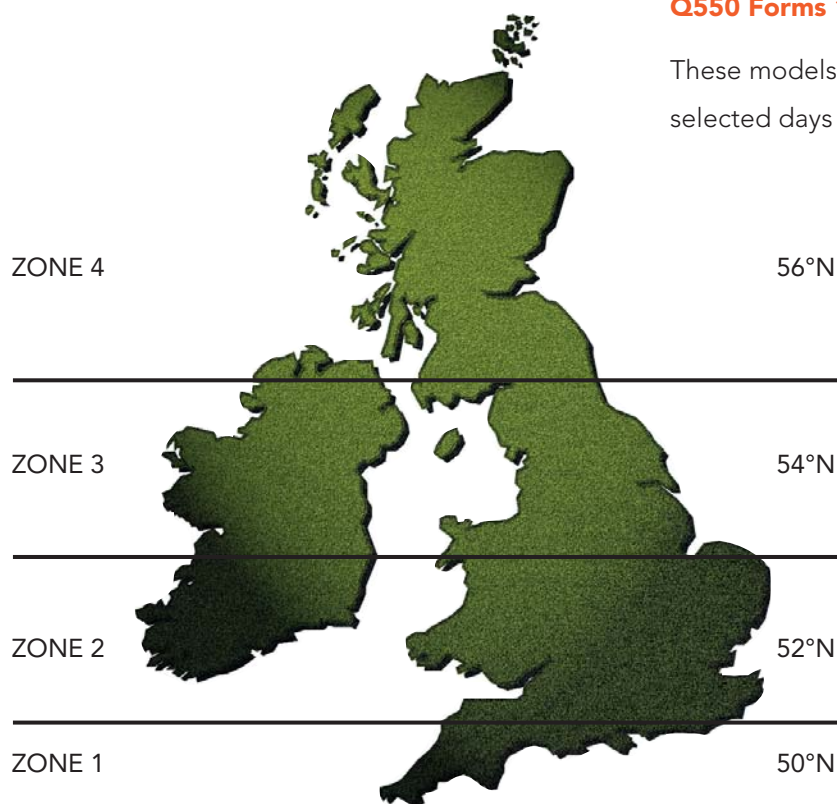


Day Omission

Normally, Solar Dial Models do not have a day omit facility. We can now offer the following models with this added feature:

Q550 Forms 13 and 14

These models allow the ON operations on selected days to be omitted.



Time Zones for UK



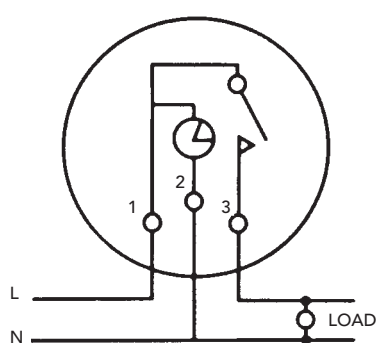
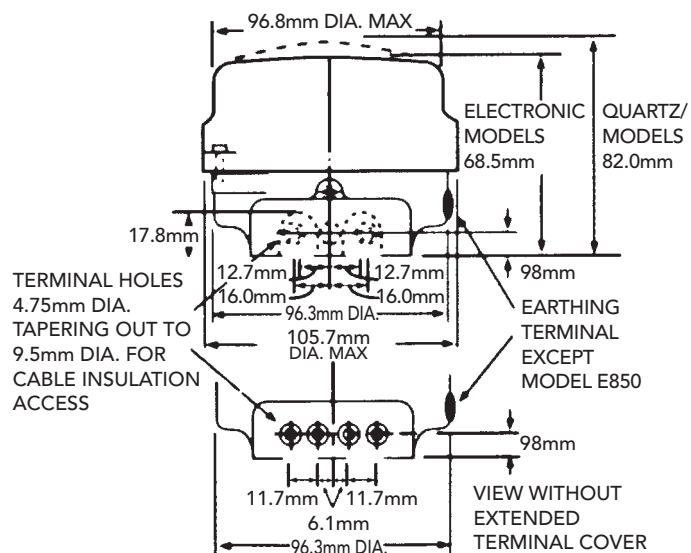
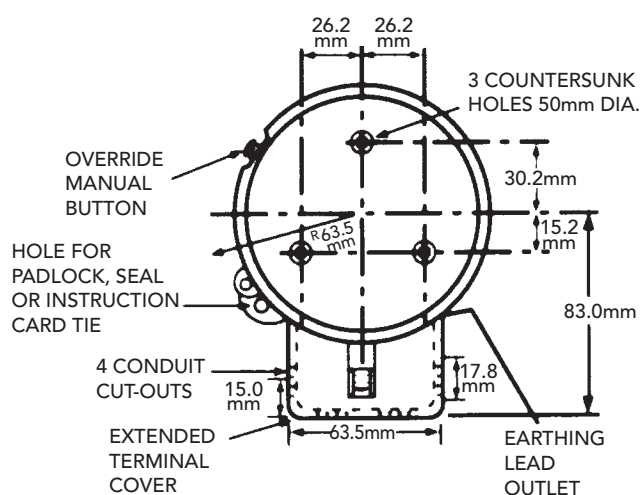
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model specifications

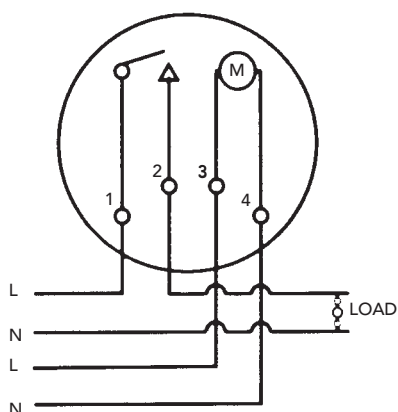
S250 and Q550 models	PROGRAMMING	24 hour programme with up to three ON and three OFF (six changeover) operations per day
	DISPLAY	24 hour dial or solar dial
	MOUNTING	Surface mounting
	CURRENT RATING	SPST: 20A resistive, SPDT: 20A resistive for circuit A and 10A resistive for circuit B)
	SUPPLY	230V, 50/60Hz a.c.
	RESERVE (Q550)	100 hrs (providing battery has been charged for 300 hrs)
	TEMP OVERRIDE FACILITY	Advance to 'off', when program 'on' and will remain 'off' until next 'on' operation and vice versa
	CABLE SIZE	6.0mm ²
	TIMING ACCURACY	5 mins/year
	POWER CONSUMPTION (Q550 MODELS)	0.6W at 230V
	AMBIENT TEMPERATURE RANGE	Designed to operate over a temperature range of 0°C to 50°C continuous
	LIVE PARTS PROTECTION	This timer is totally protected by its enclosure
	DIRT PROTECTION	Normal domestic dust deposits only
	MOISTURE PROTECTION	Ordinary: has no special protection against moisture
	SHOCK PROTECTION	Class 1 (Product must be earthed)
	DIAL CALIBRATION	15 min divisions
	SETTING ACCURACY	+/-3 minutes
	PERIOD BETWEEN UNLIKE OPERATIONS	15 minutes minimum
	PERIOD BETWEEN LIKE OPERATIONS	1¼ hours minimum
	PERIOD BETWEEN EARLY OPERATION AND PRECEDING NORMAL OPERATION	three hours minimum
	PERIOD BETWEEN EARLY OPERATION AND SUBSEQUENT NORMAL OPERATION	1¼ hours minimum
	BEAB APPROVAL	Yes
	DIMENSIONS	Height (wall mounted) 136mm, width 105.7mm, projection 82mm (Total height 146.5mm)
E850 models	PROGRAMMING	seven day programme with up to 48 ON and 48 OFF (96 operations per day)
	DISPLAY	Digital display showing real time, day, date, month and year where applicable. Simulated analogue display showing real time and programme for current 24 hours
	MOUNTING	Surface mounting
	CURRENT RATING	20A resistive for SPST and SPDT
	SUPPLY	230V, 50/60Hz a.c.
	RESERVE	Automatically rechargeable battery will retain memory for typically 50 days
	TEMP OVERRIDE	two hour boost - when programme "OFF." Advance to "OFF" when programme "ON" and will remain "OFF" until next "ON" operation
	CABLE SIZE	6.0mm ²
	TIMING ACCURACY	Better than five minutes per annum
	HOLIDAY MODE	Suspends programs for 14 days or indefinitely
	BST/GMT CHANGEVER	Automatic
	AMBIENT TEMPERATURE RANGE	Designed to operate over a temperature range of 0°C to 35°C continuous
	LIVE PARTS PROTECTION	This timer is totally protected by its enclosure
	DIRT PROTECTION	Normal domestic dust deposits only
	MOISTURE PROTECTION	Ordinary: has no special protection against moisture
	SHOCK PROTECTION	Class II (Both functional and supplementary insulation)
	PERIOD BETWEEN ON/OFF OPERATIONS	15 mins
	BEAB APPROVAL	Yes
	DIMENSIONS	Height (wall mounted) 136mm, width 105.7mm, projection 68.5mm (Total height 146.5mm)

wiring diagrams

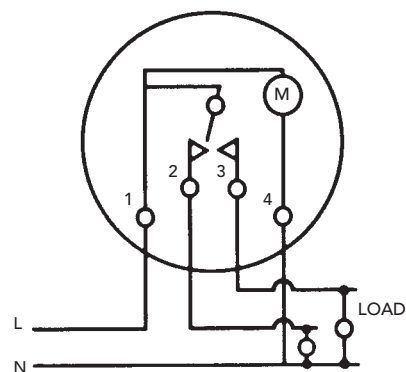
S250, Q550 and E850 Models



3 Pin models
S251 S254
Q550 Q551 Q554
E854



4 Pin models
S253 S255
Q555 Q557
Q559 Q586
E855



Changeover models
Q563
E863

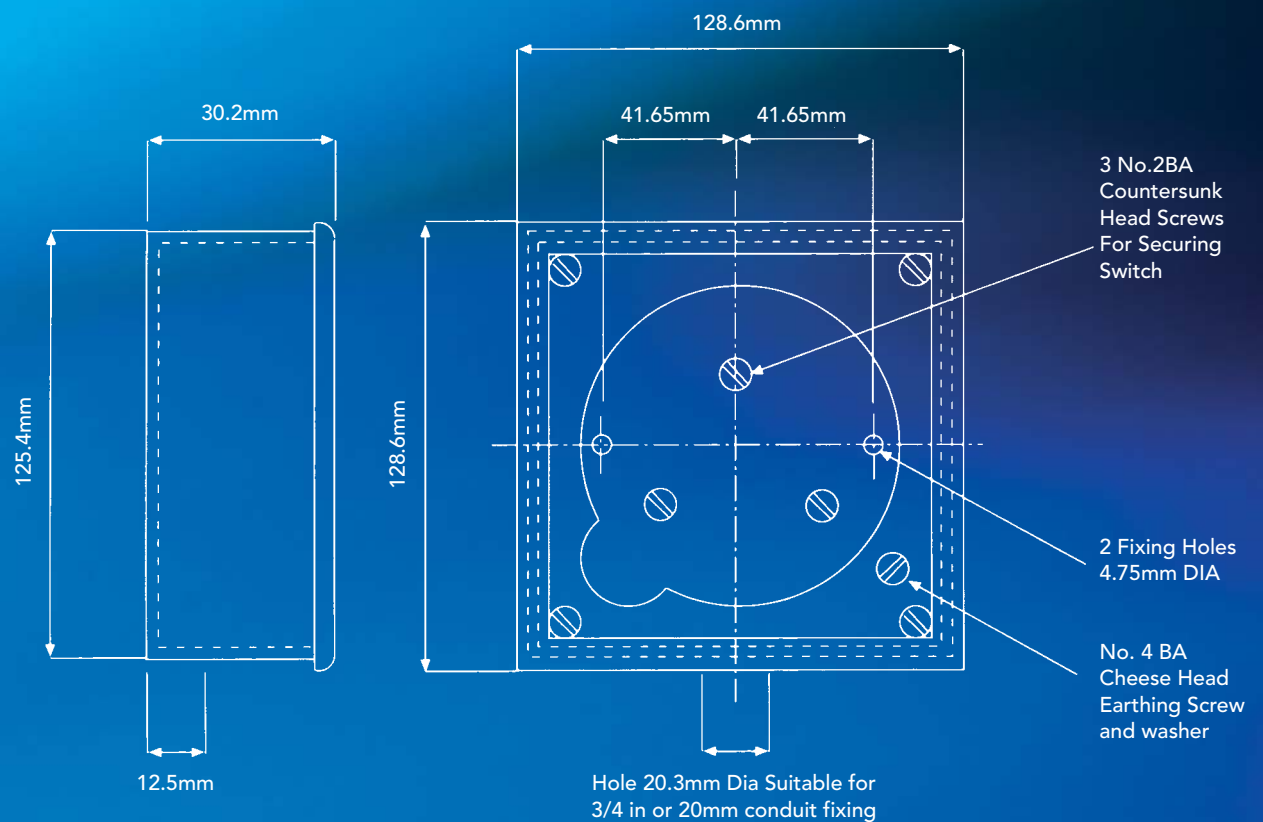


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quick reference chart

		Quartz/Electronic	Solar Dial	No. of Channels	Timer Prog.	Battery Reserve	Omit Device	Early Operations (Solar Models)	Early 'Device' (Standard Models)	Switch Type	Base Pins	Max. Operations Per 24 Hours
MODEL	S251	Q	Y	1	24HR	N		ON & OFF		SPST	3	2 or 4
	S253	Q	Y	1	24HR	N		ON & OFF		SPST	4	2 or 4
	S254	Q	N	1	24HR	N	ON			SPST	3	4 or 6
	S255	Q	N	1	24HR	N	ON			SPST	4	4 or 6
	Q550	Q	Y	1	24HR	Y	ON	ON & OFF		SPST	3	2 or 4
	Q551	Q	Y	1	24HR	Y		ON & OFF		SPST	3	2 or 4
	Q553	Q	Y	1	24HR	Y		ON & OFF		SPST	4	2 or 4
	Q554	Q	N	1	24HR	Y	ON			SPST	3	4 or 6
	Q555	Q	N	1	24HR	Y	ON			SPST	4	4 or 6
	Q557	Q	N	1	24HR	Y	OFF			SPST	4	4 or 6
	Q559	Q	N	1	24HR	Y	ON		OFF	SPST	4	4
	Q563	Q	N	1	24HR	Y	ON			SPDT	4	4 or 6
	Q586	Q	N	1	24HR	Y	ON		ON	SPST	4	4
	E854	E	N	1	7 DAY	Y				SPST	3	96
	E855	E	N	1	7 DAY	Y				SPST	4	96
	E863	E	N	1	7 DAY	Y				SPDT	4	96
FUNCTION												

conduit entry boxes dimension diagrams



FD930: For the Round Pattern Range of Sangamo Time Switches

The Conduit entry boxes are designed for interior use, FD930 is made of pressed steel with black stove enamel finish.

CUSTOMER CARE POLICY

As part of Sangamo's continuous improvement program, the Company operates a Customer Care Policy. This means that we welcome your comments and complaints, as it can only help us to improve our services to you, our customer.



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