

Electronic lubrication control unit

Model 85307



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Description

Controller model 85307 is a universal electronic control unit compatible with dual-line, single-line and progressive lubrication systems. Compact size and monitoring capabilities allow controller to be used in both mobile and industrial applications.

Quickguide defines digital and audio features available on control unit and includes wiring diagrams for reference. For complete instructional manual, visit www.skf.com.



Quickguide is not meant to be an alternative to instructional manual, but rather description of key features for someone with lubrication experience. Owner/operator should be familiar with electrical equipment before operating.

⚠ WARNING

- Never weld on machine while main switch is **ON**. Ensure main switch is **OFF** and correctly tagged. Welding on machine can cause serious damage to controller.
- Do not alter or modify any part of controller.
- Do not mount controller near area with excessive heat.
- Always use specified fuse rating for controller.
- Never exceed voltage rating of controller.
- Never expose controller to direct sunlight.
- Never expose controller to water or other substances.

Table 1

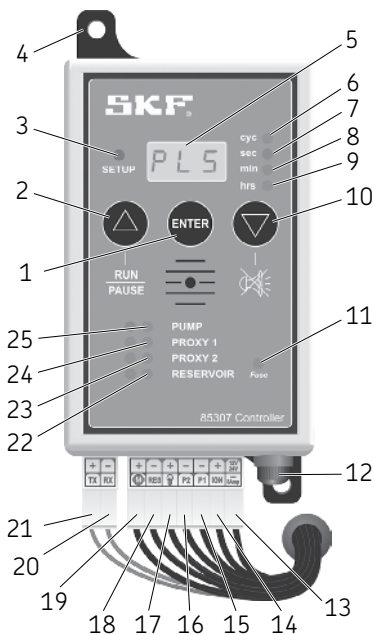
Specifications

Voltage	10V  to 30V 
Current drain	150 mA maximum (no load) 70 mA nominal
Pump output	7 A rms. maximum
Lamp output	3 A maximum
Switching	Solid state short circuit protected
Fuse	8 Amp fast blow 0.79 in (20 mm) glass
Connection	14 way MOLEX MINIFIT – JR
Communications	RS232 type
Dimensions	2.8 × 5.7 × 1.5 in (70 × 145 × 38 mm) ¹⁾
Weight	0.66 lbs (300 g)
Protection	IP54
Temperature range	5 °F to 122 °F (-15 °C to +50 °C)

¹⁾ Includes mounting bracket.

Fig. 1

Keypad layout



Item	Description
1	Enter button
2	Run/pause
3	Setup indicator
4	Mounting bracket
5	LED display
6	Cycle indicator
7	Second indicator
8	Minute indicator
9	Hour indicator
10	Select value down or silent buzzer
11	Blown fuse indicator
12	Fuse holder 8A
13	Power positive/negative
14	Ignition input/aux power output positive
15	Sensor 1 positive/negative
16	Sensor 2 positive/negative
17	External lamp
18	Reservoir sensor connection
19	Pump motor positive/negative
20	RS 232 connection
21	RS 232 connection
22	Reservoir low level status indicator
23	Sensor 2 status indicator
24	Sensor 1 status indicator
25	Pump status indicator

Table 2

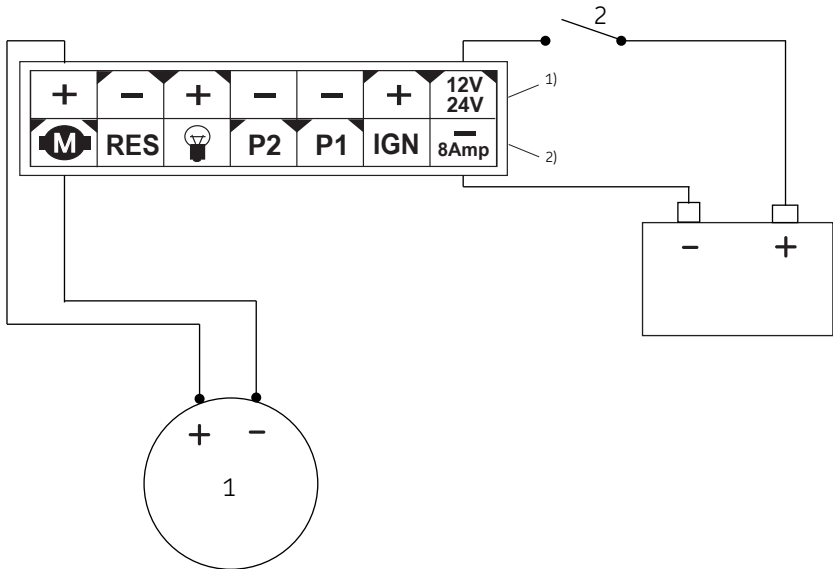
Pump status indicator

Signal	Description
Steady green	Pump is not running.
Flashing green	Pump is running.
Steady red	Pump is faulty.

LED code descriptions

SLS	Single-line system
PLS	Progressive-line system
dLS	Dual-line system
n-O	Normally open (sensors)
n-C	Normally closed (sensors)
L-S	External lamp steady (continuous supply)
L-F	External lamp flashing (pulsed supply)
nFE	Non fatal error (pump continues on low level fault)
r	Run time in cycles, seconds, minutes or hours
P	Pause time in seconds, minutes or hours
F	Fault time in seconds, minutes or hours
U	Vent time in seconds, minutes or hours
rCC	Run cycle counter
YES	Confirms program changes
tSt	Test mode for checking installed devices
t	Time out or dwell time for sensors
FE	Fatal errors (pump stops on low level fault)
n0	Do not accept program changes
Stb	Standby mode

Wiring diagram of progressive-line system without proxy sensor



Item	Description
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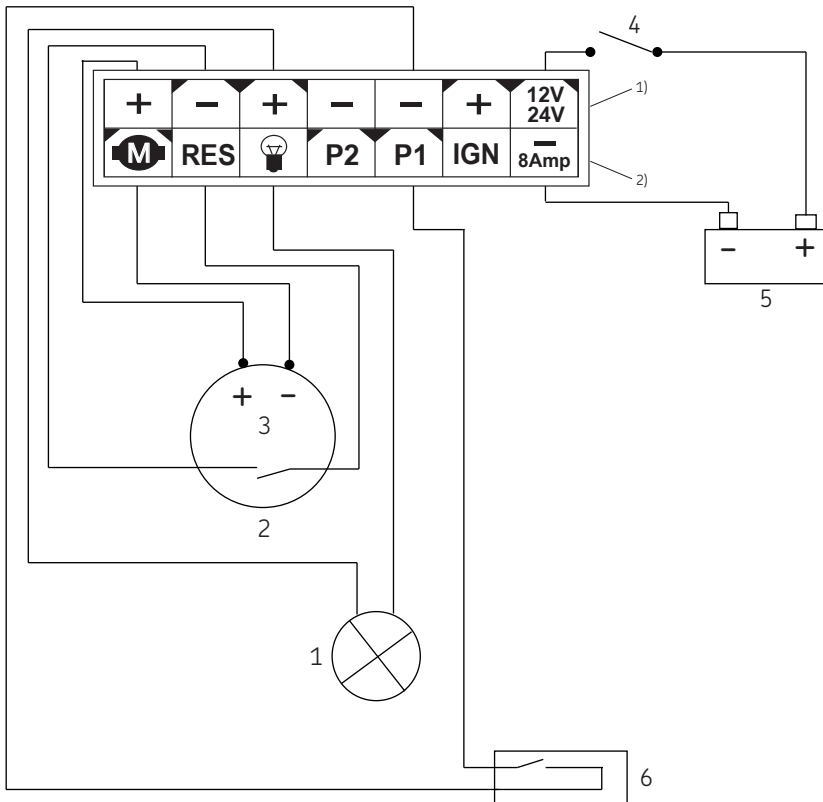
- | | |
|---|----------|
| 1 | Motor |
| 2 | Ignition |

¹⁾ Top row represents front of controller.

²⁾ Bottom row represents back of controller.

NOTE: If motor amp draw exceeds the maximum specification (→ Table 1, page 2), solenoid relay switch (698975) must be used. Refer to (→ Diagram 6, page 10).

Wiring diagram of progressive-line system with one proxy sensor and external warning lamp



Item	Description
1	External warning lamp
2	Low level sensor
3	Motor
4	Power switch
5	Power supply
6	Proxy 1

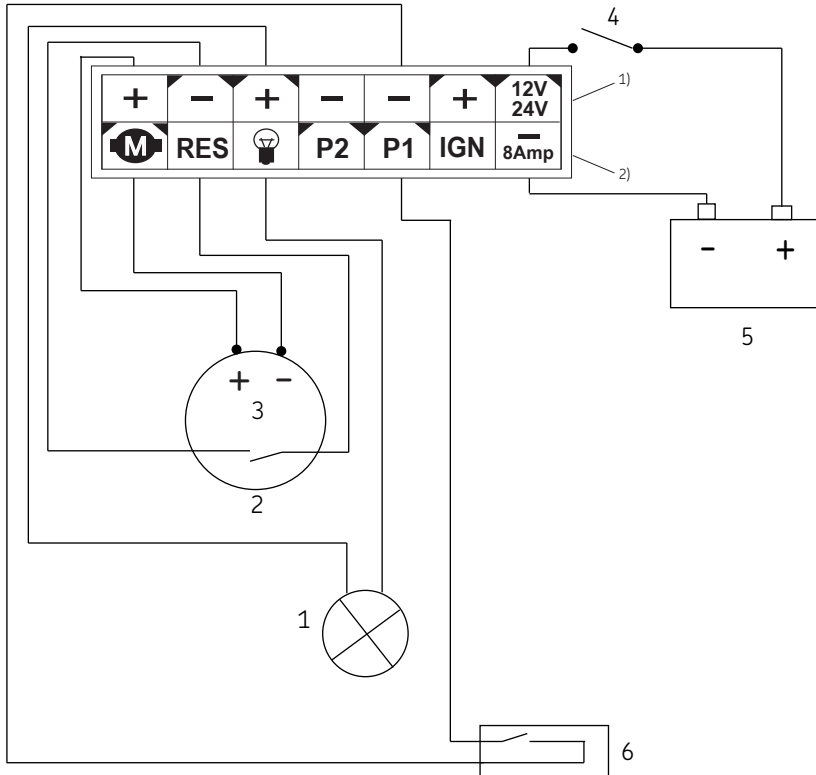
¹⁾ Top row represents front of controller.

²⁾ Bottom row represents back of controller.

*NOTE: If motor amp draw exceeds the maximum specification (→ Table 1, page 2), solenoid relay switch (69897S) must be used.

Refer to (→ Diagram 6, page 10).

Wiring diagram of single-line system with pressure switch



Item	Description
1	External warning lamp
2	Low level sensor
3	Motor
4	Power switch
5	Power supply
6	Pressure switch

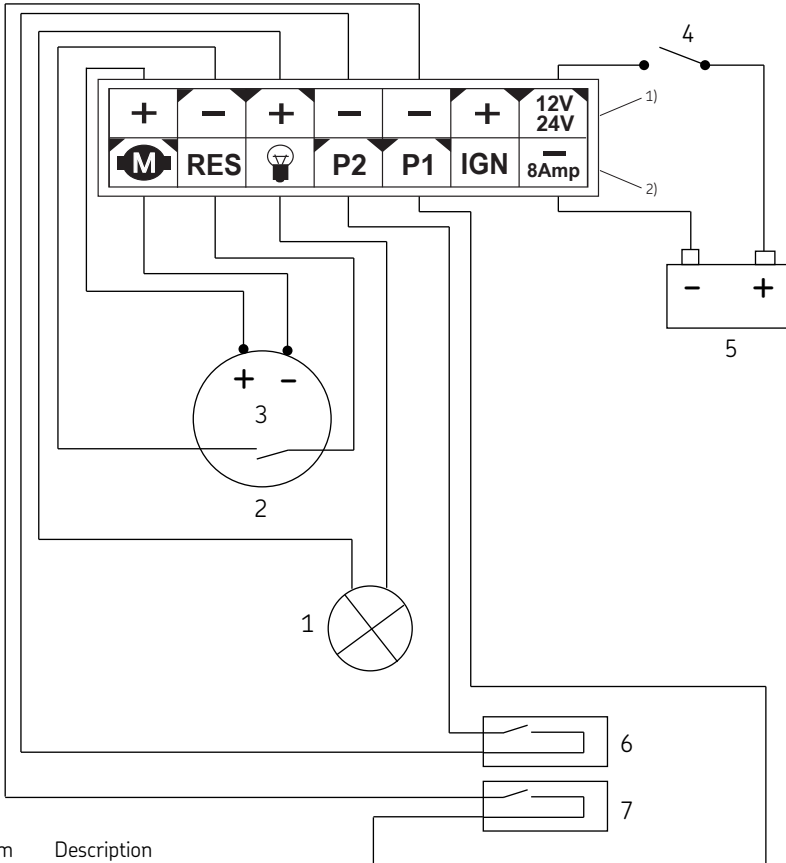
¹⁾ Top row represents front of controller.

²⁾ Bottom row represents back of controller.

*NOTE: If motor amp draw exceeds the maximum specification (→ Table 1, page 2), solenoid relay switch (69897S) must be used.

Refer to (→ Diagram 6, page 10).

Wiring diagram of dual-line system with two pressure switches and hydraulic change-over valve



Item	Description
1	External warning lamp
2	Low level sensor
3	Motor
4	Power switch
5	Power supply
6	Pressure switch 1
7	Pressure switch 2

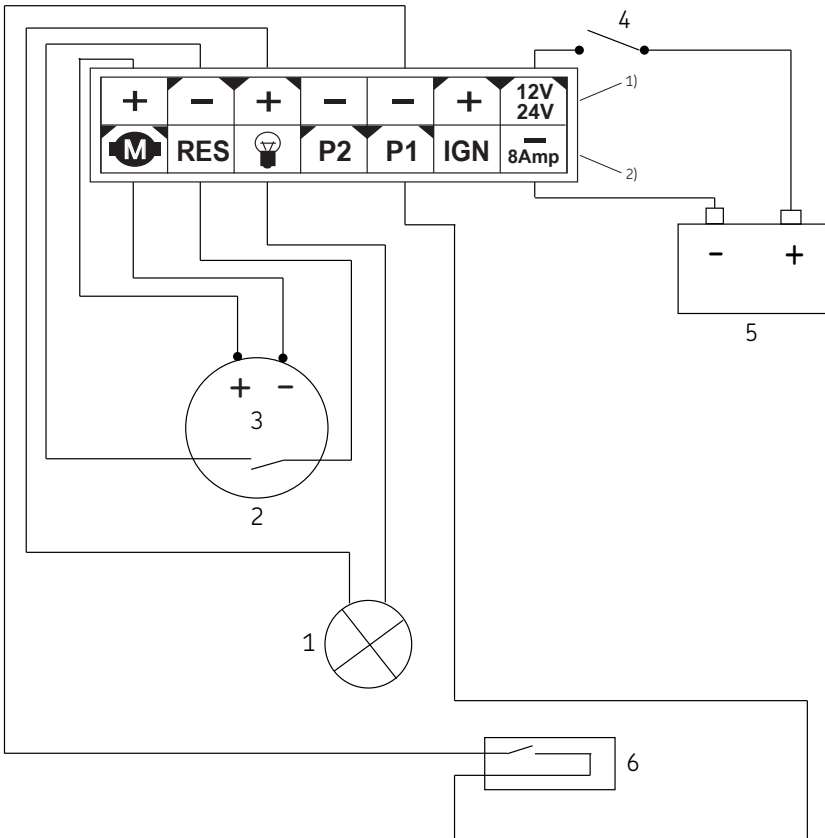
¹⁾ Top row represents front of controller.

²⁾ Bottom row represents back of controller.

*NOTE: If motor amp draw exceeds the maximum specification (→ Table 1, page 2), solenoid relay switch (69897S) must be used.

Refer to (→ Diagram 6, page 10).

Wiring diagram of dual-line system with 1/2 cycles and hydraulic change-over valve



Item	Description
1	External warning lamp
2	Low level sensor
3	Motor
4	Power switch
5	Power supply
6	Micro switch

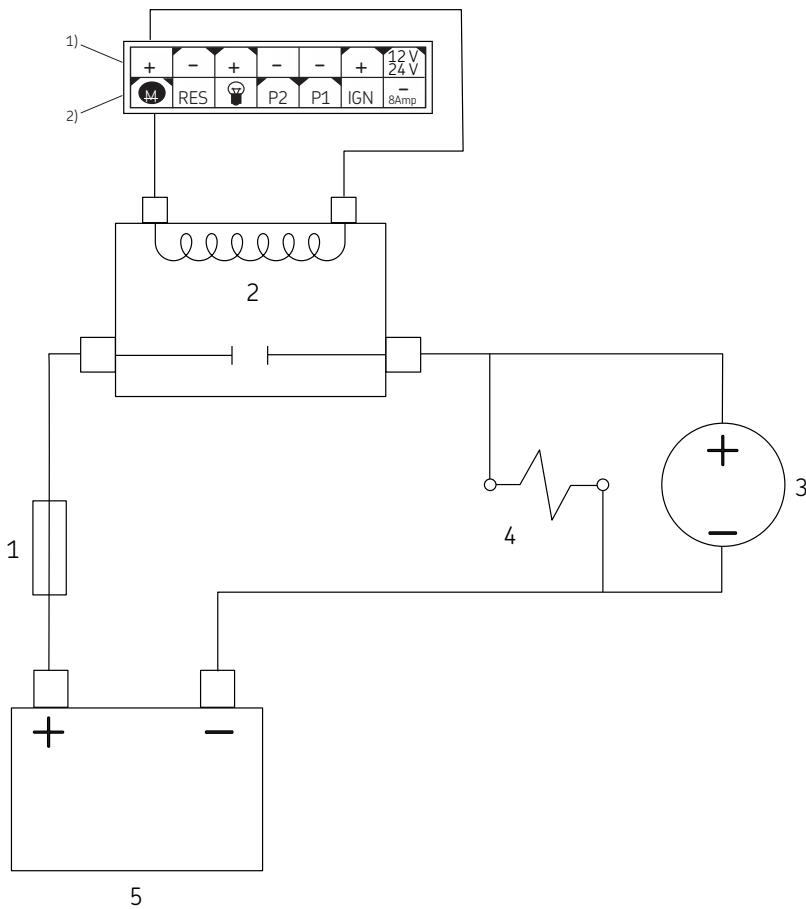
¹⁾ Top row represents front of controller.


²⁾ Bottom row represents back of controller.

*NOTE: If motor amp draw exceeds the maximum specification (→ Table 1, page 2), solenoid relay switch (69897S) must be used.

Refer to (→ Diagram 6, page 10).

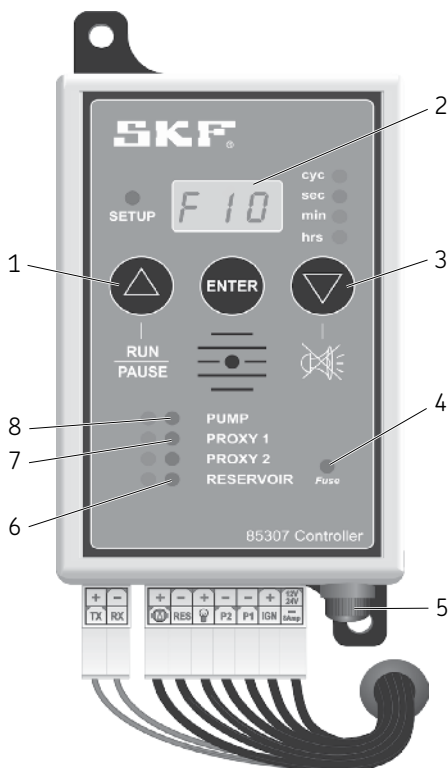
Wiring diagram of dual-line system with relay switch*



Item	Description
1	Fuse, 7.5 A
2	Solenoid relay switch
3	Motor
4	Vent valve solenoid (NO)
5	Power supply, 12 or 24 V 

- ¹⁾ Top row represents front of controller.
²⁾ Bottom row represents back of controller.
 * Indicates change

Keypad layout



Item	Description
1	Press RUN/PAUSE to reset faults.
2	Fault indication – counts up from seconds to minutes to hours indicating how long fault has been active.
3	Press ∇ button to silence buzzer.
4	Blown fuse indication – replace with 8A fuse.
5	Fuse holder – use 8A fuse.
6	Low level fault – possible cause, reservoir empty.
7	Proxy 1 fault - either blockage in system or faulty sensor.
8	Pump fault - either short circuit or disconnected wires.

Warranty

The instructions do not contain any information on the warranty. This can be found in the General Conditions of Sales, available at:

www.lincolnindustrial.com/technicalservice

or www.skf.com/lubrication.

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