Electric drive: ROM Series

ROM no longer available

The ROM Series of electric drives from Rotork ensures a low-noise, reliable actuation of various ball valves and butterfly valves. The drives have visual indicators that signal the position of the valve and also contain a manual actuator.

Torque limit switches provide additional protection for the motor. The working range of the servomotor can be set by means of limit switches. As standard the ROM drive is supplied with an anti-condensation heater element and extra limit switches.

The ROM can be supplied with an adaptor for the drive shaft so that it fits the ball valve or butterfly valve (ISO-top) to be actuated.

APPLICATION

Electric drives are used predominantly as a control valve on butterfly valves in automated processes, such as pump and decontamination installations

CHARACTERISTICS

- Narrow, compact and lightweight induction motors
- Non-clutch design: direct-acting manual operation
- 2 extra limit switches
- Anti-condensation heater element
- Thermostat
- Position indicator on the head of the motor
- ISO-top connection
- Torque switches and auxiliary switches
- Electric leadthrough 2x M20 x 1.5p
- Aluminium powder-coated water and dust-tight housing, IP68
- ISO 9001, CE standard
- 1 motor for both 12 - 24 V DC/AC, 50-60 Hz (multi-voltage)
- Optionally with potentiometer or position transmitter

TECHNICAL DATA

Power supply	: 12 - 24 V DC/AC, 50-60 Hz (multi-voltage)
Maximum temperature	: -30° to +70°C
Relative humidity	: 30% to 95%
Material	: aluminium alloy with powder coating

Mechanical properties

Model	WEIGHT (kg)	Manual	Drive connection (mm)	Basic design (to ISO)
ROM-1	2,2	Level	14	F03/F05
ROM-A	2,8	Level	17	F05/F07
ROM-2	12	Handwheel	22	F07
ROM-3	12	Handwheel	22	F07
ROM-4	26	Handwheel	36	F10
ROM-5	26	Handwheel	36	F10
ROM-6	26	Handwheel	36	F10

Electric performance (24V DC/AC)

Model	Speed (sec/°90)	Torque (Nm)	Max. motor power (W)	Motor speed (rpm)	Max. current consumption run (A)	lock (A)
ROM-1	4,5	8	10	1700	0,6	1,2
	20	35	3,75	1700	0,6	1,2
ROM-A	30	50	3,75	1700	0,6	1,2
ROM-2	17	90	43	1360	1,1	9
ROM-3	22	150	43	1360	1,1	9
	150	150	43	1360	1,1	9
ROM-4	23	400	130	1250	5,5	20
	150	400	130	1250	5,5	20
ROM-5	30	500	130	1250	5,5	20
ROM-6	38	650	130	1250	5,5	20

INSTALLATION & MAINTENANCE

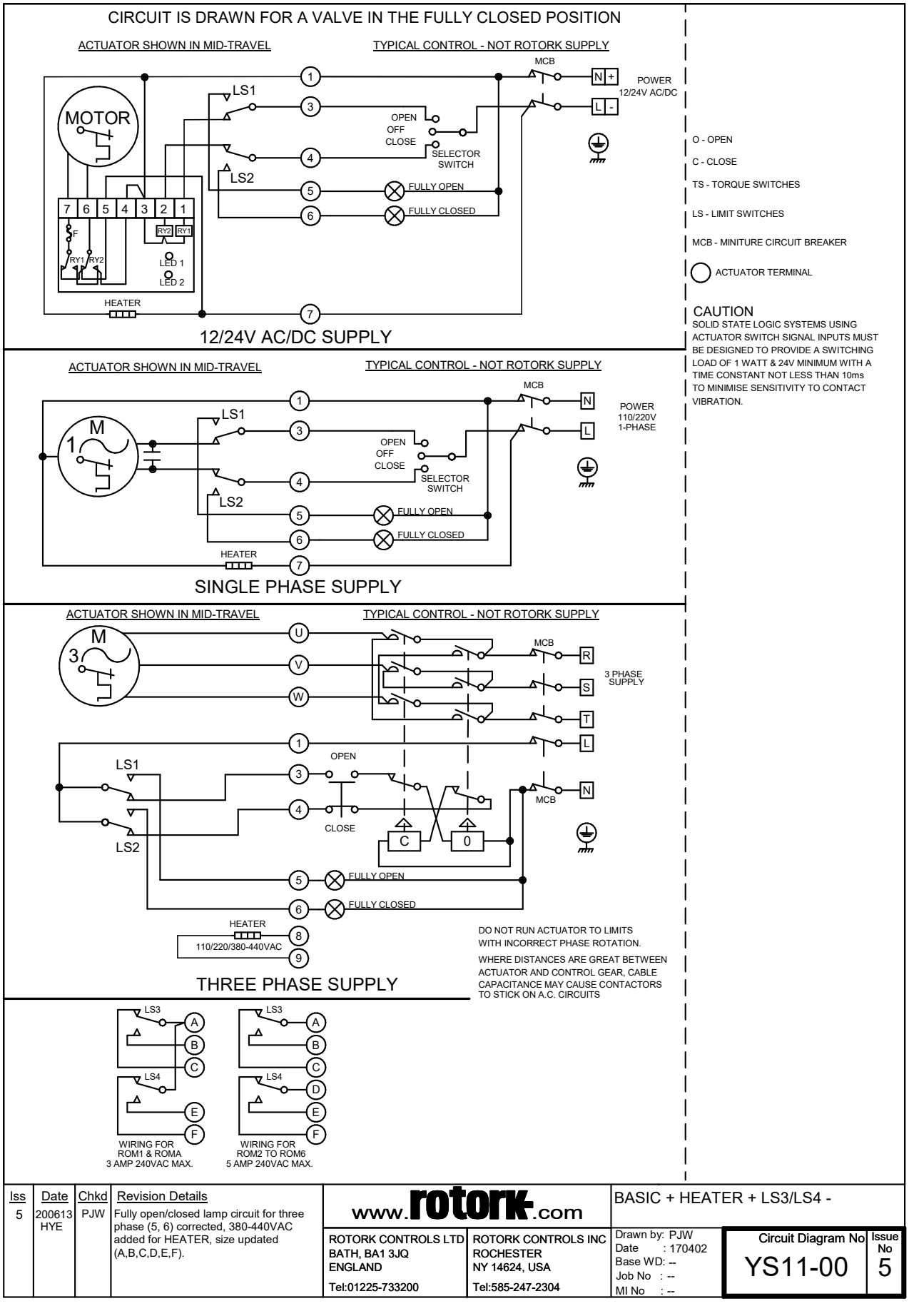
Installation

- Read the enclosed installation and maintenance instructions before installation.
- The bottom 2 limit contacts are for opening and closing. The top 2 extra 'vacant' limit contacts 1 and 3 and 2 and 4 are for the connection.
- The motor has a loose AC printed circuit board that can transform the voltage to DC (the motor is DC).
- The motor can therefore be connected as an AC or as a DC motor.
- Ensure correct wiring with respect to voltage and power.
- Seal the housing and the nut inlet after wiring by means of a matching cable nut or blind plug to prevent the ingress of dust or water and to retain the IP68 protection.
- Do not install the motor upside down or under the horizontal line.
- Do not install the motor if there is a possibility of hazardous or explosive gases.
- The motors are not suitable for continuous operation. Maintain a rest period of at least 2x the running time.
- If several electric drives have to operate at the same time, these must be connected using separate cables.

Maintenance

- Switch off the electric power supply before starting maintenance work.

CIRCUIT DIAGRAMS



Iss	Date	Chkd	Revision Details
5	200613 HYE	PJW	Fully open/closed lamp circuit for three phase (5, 6) corrected, 380-440VAC added for HEATER, size updated (A,B,C,D,E,F).

www.rotork.com

BASIC + HEATER + LS3/LS4 -

ROTORK CONTROLS LTD
BATH, BA1 3JQ
ENGLAND
Tel:01225-733200

ROTORK CONTROLS INC
ROCHESTER
NY 14624, USA
Tel:585-247-2304

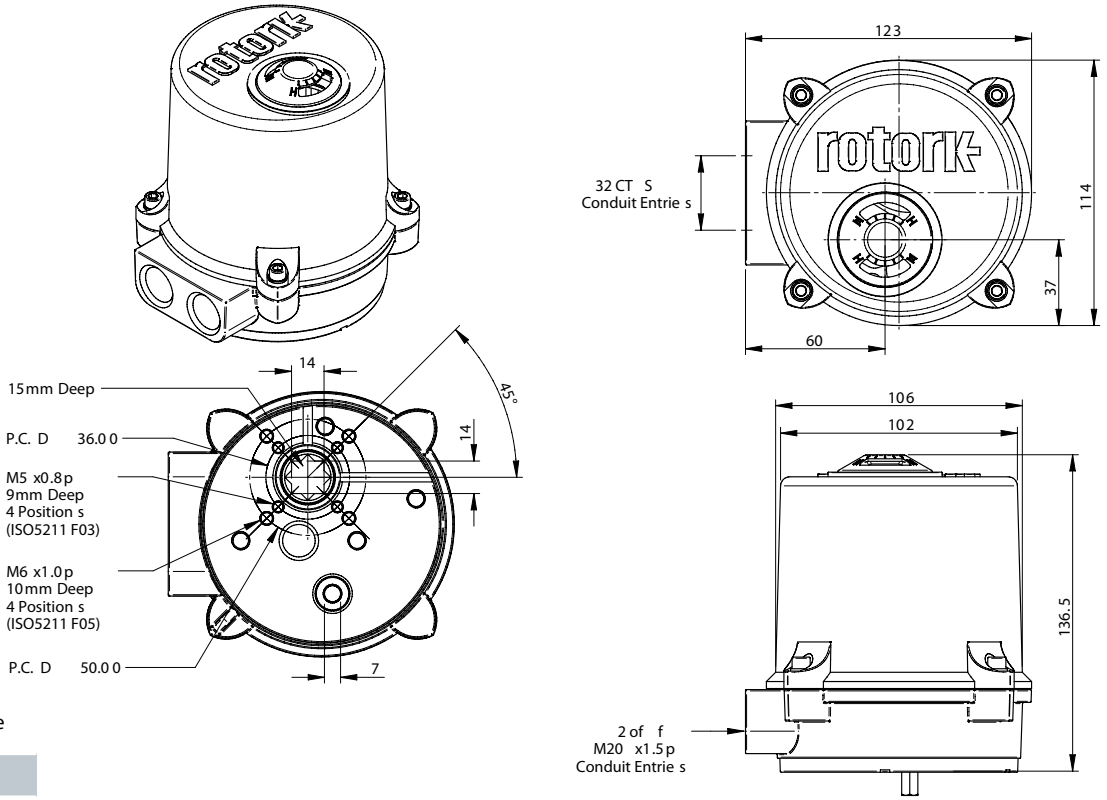
Drawn by: PJW
Date : 170402
Base WD: --
Job No : --
MI No : --

Circuit Diagram No: YS11-00

Issue No: 5

TECHNICAL DRAWINGS I

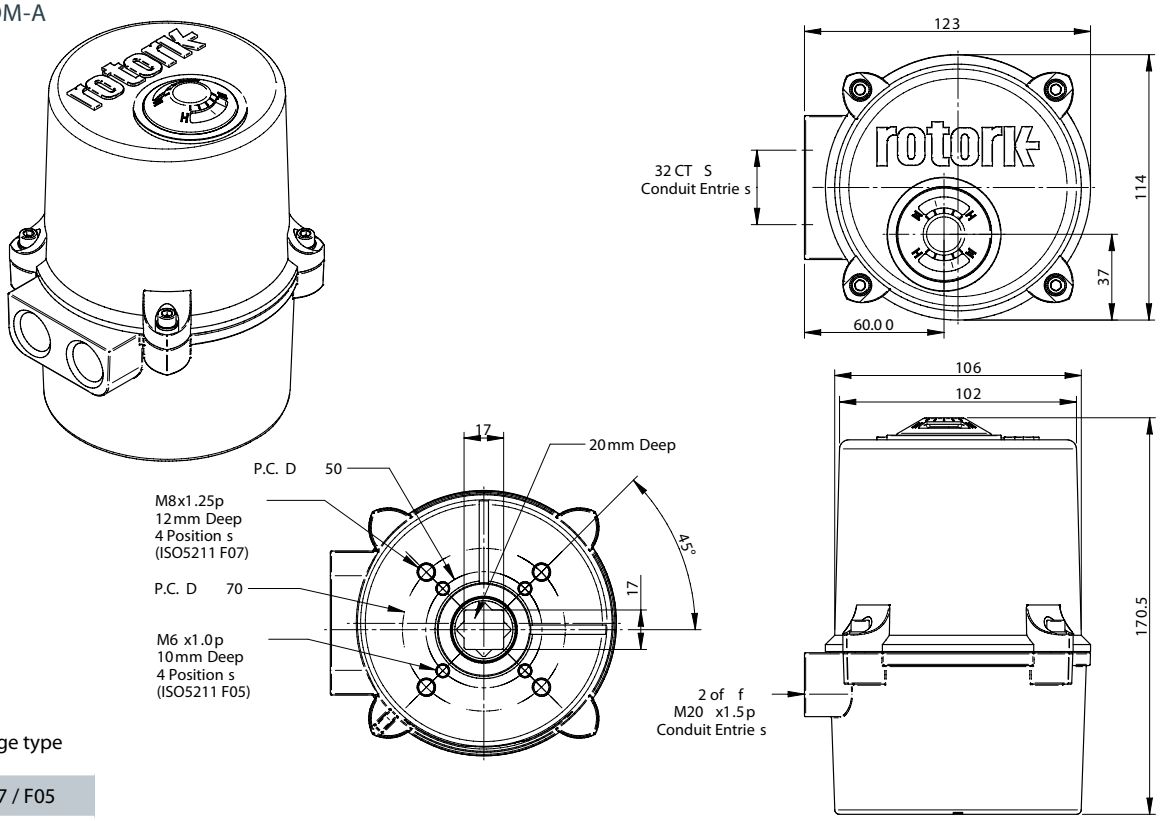
The ROM-1



Flange type

F05 / F03

The ROM-A

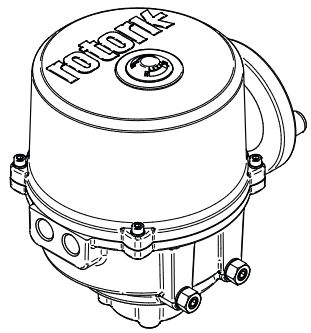


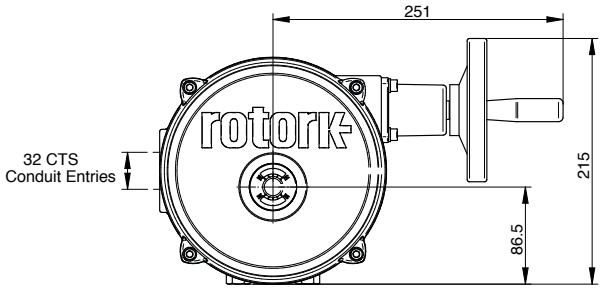
Flange type

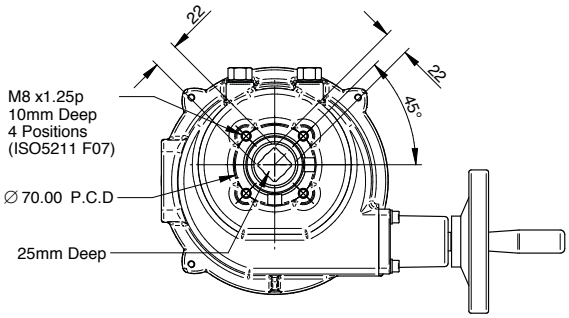
F07 / F05

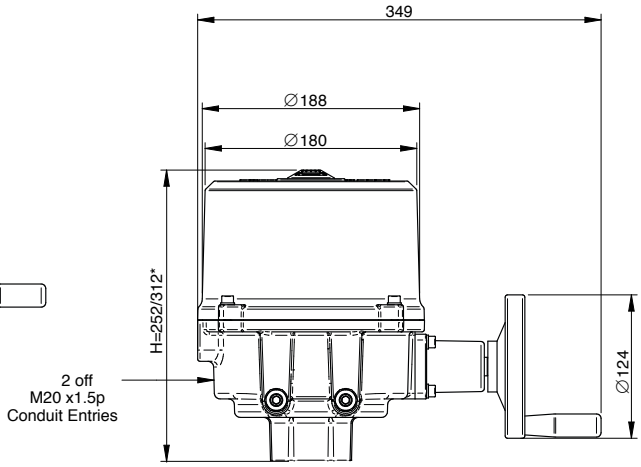
TECHNICAL DRAWINGS II

The ROM-2/3







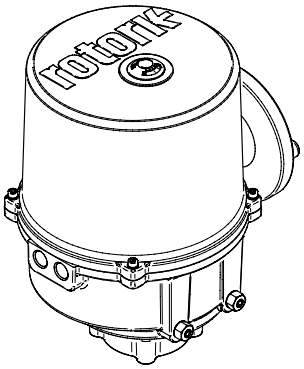


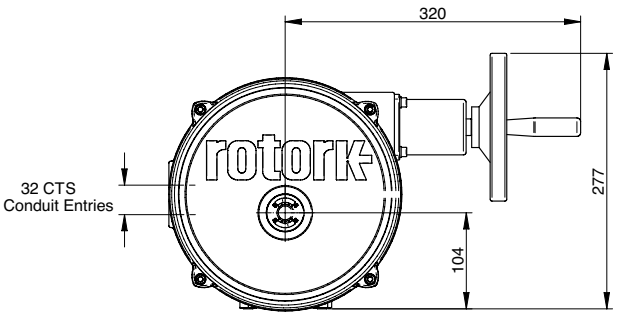
Flange type

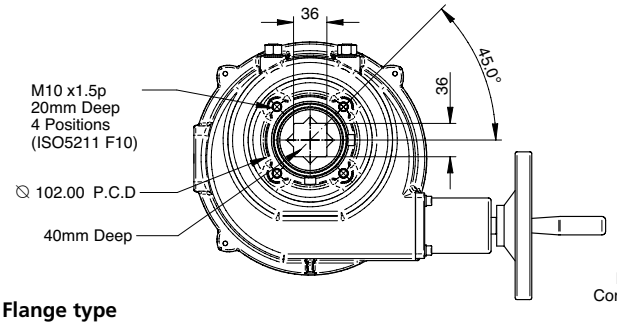
F07

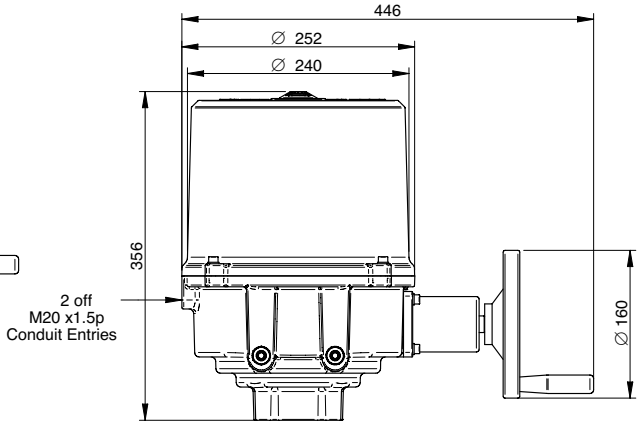
* ROM-2/3	110 V, 220 V AC 1-Phase	H=252
	220 V, 380 V, 440 V AC 3-Phase	
	12 V, 24 V AC/DC	H=312

The ROM-4/5/6









Flange type

F10