

"APROLI 280 BATT" is an oil-hydraulic gate operator designed for swinging gates hinged to large pillars. By removing the cover it is possible to see the jack, the oil reservoir above it and the valve block that connects the two parts into one single assembly. The valve block incorporates the main hydraulic features of the unit, ie. manual override by unscrewing the release valve in events like power failure, access to this valve is made easy through a suitably designed hinged door in the cover; air bleeding screw to facilitate oil flowing in the system; adjustable open and close safety pressure valves to control the amount of force developed by the operator and ensure total anti-crush operations. In the valve block there is also a double by-pass valve that holds the gates safely open or closed, ie. hydraulically locked in either positions, when the motor stops. On starting the motor, oil is allowed to flow free and the gates can be operated as pre-set. The electric motor and the lobe designed pump are in an oil bath inside the oil reservoir, the external end cap of which is fitted with the electrical connections. It is inside the jack where movements are hydraulically transmitted: the shaft has a toothed central part that can mesh a rack system and can rotate 205°; shaft rotation is by oil pressure applied to either side of the rack by means of two pistons. The shaft has a square indented end part to which the articulated arm can be fitted. This is made of pressure cast, heat treated aluminium and consists of two sections hinged together; the gate fitting section is adjustable and has a suitably designed shoe for gate fixing. The whole operator is weatherproof and made of shock resistant materials. Pressure cast aluminium has been used to produce the valve block, the main assembly block, the jack central casting and the fixing bracket. This one is factory machined to provide ready made holes for fixing and cable entry. The extremely precise movements of the parts inside the jack are guaranteed by treated, hardened steel which has been used to produce the rack, the shaft and the cylinder liners, which are very finely polished to provide a smooth finish. Sealing component parts such as oil rings and seals are also top quality, and the screws are galvanized. The cover is made of plastic to avoid extra weight on the operator; it is not fragile, though and made of highly shock resistant materials. On request, "APROLI 280 BATT" can be supplied with two flow regulators to be factory incorporated in the oil circuit to ensure constant shaft rotation speed rate in both gate travel directions. Among the other most relevant features are the incorporated, adjustable gate stop in open gate position and the earth wire with connection facility. "APROLI 280" can be connected to the Elpro control panel, an extremely reliable control unit, and can be remotely operated from a distance by a radio transmitter, specially encoded, or by a keyswitch, with custom-made key, or by a digital key pad; the system can be connected to safety devices such as safety rubber profiles and photocells.

# **TECHNICAL SPECIFICATIONS**

## HYDRAULIC PUMP

P3 - Hydraulic pump capacity-----0.85 l/min. Average working pressure \_\_\_\_\_ 1 MPa (10 bar) Maximum supplied pump pressure \_\_\_\_3 MPa (30 bar) Opening time \_\_\_\_\_23s Rated torque \_\_\_\_\_196.2Nm Hydraulic oil type.....Oil Fadini Shaft rotation angle.....max. 205° Static weight of operator \_\_\_\_\_11Kg Protection standard .....IP 555

**ELECTRIC MOTOR** 

Supply voltage\_\_\_\_\_230V Frequency \_\_\_\_\_50Hz Absorbed current \_\_\_\_\_1.2A Absorbed power \_\_\_\_\_250W Capacitor \_\_\_\_\_ 12.5uF Motor rotation speed\_\_\_\_\_1'350 r.p.m. Intermittent service\_\_\_\_\_S3

Power output \_\_\_\_\_\_ 0.18KW (0.25PS)

### **PERFORMANCE**

Service cycle: 23s opening - 30s dwell - 23s closing - 30s dwell Complete cycle time \_\_\_\_\_106 s Complete Opening - Dwell - Closing - Dwell cycles - No.34/hour Annual cycles (with 8 hours of use per day).....No.99'000

# **VERSIONS**

- Hydraulic locking ..... Gate length each 1.80m Max. gate weight 100Kg
- With flow regulator------Gate length each 1.80m Max. gate weight 100Kg

**OIL-HYDRAULIC OPERATOR FOR GATES WITH** LARGE PILLARS

APROLI 280 BATT



FADIN