Technical sheet:

## ES 614





|       |   | <b>ES 614</b> Crea | ated on May 13, 2024 at 7:13:42 AM UTC |
|-------|---|--------------------|--|
|       | Technical characteristics                                   |                    | Metric                                 |
| 1.1   | Manufacturer  |                    | Manitou                                |
| 1.2   | Model Name  |                    | ES 614                                 |
| 1.3   | Power source  |                    | Electrical                             |
| 1.4   | Operator type   |                    | Pedestrian                             |
| 1.5   | Max. capacity   | Q                  | 1400 kg                                |
| 1.6   | Load center of gravity                                      | С                  | 600 mm                                 |
| 1.8   | Distance from Load backrest to center of rear axle          | X.                 | 687 mm                                 |
| 1.9   | Wheelbase   | у                  | 1250 mm                                |
|       | Weight  |                    |  |
| 2.1   | Service weight  |                    | 1092 kg                                |
| 2.2   | Weight on front axle (laden) / rear axle (laden)            |                    | 1037 kg / 1453 kg                      |
| 2.3   | Weight on front axle (Unladen) / rear axle (Unladen)        |                    | 851 kg / 240 kg                        |
|       | Wheels  |                    |  |
| 3.1   | Tires type  |                    | Bandage                                |
| 3.3   | Number of load wheels / Size of load wheels                 |                    | 2 / 82x68                              |
| 3.4   | Number of stabilizer wheels / Size of the stabilizer wheels |                    | 1 / 140x60                             |
| 3.5   | Number of front wheels / rear wheels                        |                    | 2 / 4                                  |
| 3.5.2 | Number of drive wheels / Size of drive wheels               |                    | 1/230x70                               |
| 3.6   | Front wheel gauge   | b10                | 529 mm                                 |
| 3.7   | Rear wheel gauge  | b11                | 380 mm                                 |
|       | Dimensions  |                    |  |
| 4.15  | Fork height in low position                                 | h13                | 85 mm                                  |
| 4.19  | Overall length  | l1                 | 1910 mm                                |
| 4.20  | Length to face of forks                                     | I2                 | 761 mm                                 |
| 4.21  | Overall width   | b1                 | 800 mm                                 |
| 4.22  | Forks section / width / length                              | s / e / l          | 60 mm / 185 mm / 1150 mm               |
| 4.24  | Fork carriage width   | b3                 | 700 mm                                 |
| 4.32  | Ground clearance at centre of wheelbase                     | m2                 | 30 mm                                  |
| 4.33  | Aisle Width for pallets 1000 x 1200 crossways               | Ast                | 2464 mm                                |
| 4.34  | Aisle width for 800 x 1200 pallet lengthways                | Ast                | 2438 mm                                |
| 4.35  | Turning radius  | Wa                 | 1588 mm                                |
| 4.9   | Height tiller min. / max.                                   | h14 / h14          | 750 mm / 1250 mm                       |
|       | Performances  |                    |  |
| 5.1   | Travel speed (laden / unladen)                              |                    | 6 km/h / 6 km/h                        |
| 5.2   | Lifting speed (laden / unladen)                             |                    | 0.18 m/s / 0.30 m/s                    |
| 5.3   | Lowering speed (laden / unladen)                            |                    | 0.27 m/s / 0.22 m/s                    |
| 5.8   | Max Gradeability (laden / unladen)                          |                    | 7 % / 10 %                             |
| 5.10  | Service brake   |                    | Electro magnetic                       |
|       | Engine  |                    |  |
| 6.1   | Drive motor rating S2 60 min                                |                    | 1.50 kW                                |
| 6.2   | Lift motor rating at S3 15%                                 |                    | 3 kW                                   |
| 6.3   | Battery according to DIN 43531/35/36 A, B, C                |                    | DIN 43535-B                            |
| 6.4   | Battery voltage / capacity                                  |                    | 24 V / 180 Ah                          |
| 6.5   | Battery weight (+/- 5%)                                     |                    | 189 kg                                 |
|       | Miscellaneous   |                    |  |
| 8.1   | Type of drive control                                       |                    | AC                                     |
| 8.4   | Sound level at the driver's ear according to DIN 12 053     |                    | 65 dB                                  |

## ES 614 - Dimensional drawing



## Characteristics of masts and residual capacities

| Central Cylinder Simplex (CCS)  |    | CCS 15 | CCS 17 |
|---------------------------------|----|--------|--------|
| h1 - Mast lowered height        | mm | 1930   | 2180   |
| h2 - Mast free lift             | mm | 1505   | 1755   |
| h3 - Mast lifting height        | mm | 1505   | 1755   |
| h4 - Mast extended height       | mm | 1944   | 2194   |
| Residual capacity at max height | kg | 1400   | 1400   |

| Full Visibility Duplex (FVD)    |    | FVD 29 | FVD 34 | FVD 38 |
|---------------------------------|----|--------|--------|--------|
| h1 - Mast lowered height        | mm | 1930   | 2180   | 2380   |
| h3 - Mast lifting height        | mm | 2935   | 3435   | 3835   |
| h4 - Mast extended height       | mm | 3374   | 3874   | 4274   |
| Residual canacity at max height | kn | 1350   | 1100   | 900    |

| Free Lift Duplex (FLD)          |    | FLD 29 | FLD 34 |
|---------------------------------|----|--------|--------|
| h1 - Mast lowered height        | mm | 1930   | 2180   |
| h2 - Mast free lift             | mm | 1505   | 1755   |
| h3 - Mast lifting height        | mm | 2930   | 3430   |
| h4 - Mast extended height       | mm | 3369   | 3869   |
| Residual capacity at max height | kg | 1350   | 1100   |

| Free Lift Triplex (FLT)         |    | FLT 42 | FLT 47 | FLT 54 |
|---------------------------------|----|--------|--------|--------|
| h1 - Mast lowered height        | mm | 1889   | 2049   | 2300   |
| h2 - Mast free lift             | mm | 1465   | 1625   | 1875   |
| h3 - Mast lifting height        | mm | 4245   | 4725   | 5455   |
| h4 - Mast extended height       | mm | 4701   | 5181   | 5880   |
| Residual capacity at max height | kg | 700    | 550    | 500    |





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