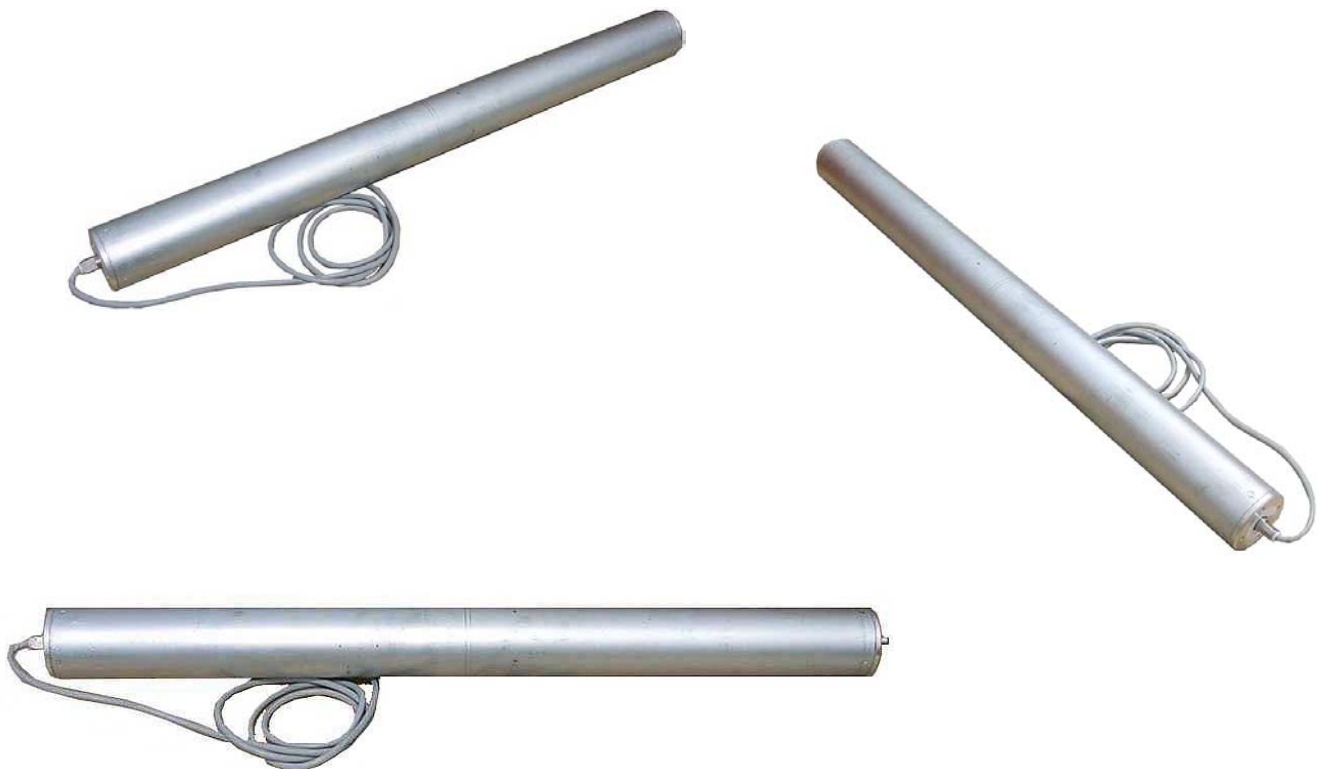


LOGISTIC PRODUCTS DIVISION

Recipient:

Motorised rollers RL 89



GENERAL PRESENTATION

The multifunction motorised drum RL89

About a few kilograms to a 1500 Kg load, the RL89 give possibilities to realise handling industrials solutions which are *economics*, *modularised*, and which provide *security* and great *viability* owing to an *efficacy and simple integration*.

Economic,

The RL89 solution is *less expansive* than a traditional solution. This comparison must be considered about these points:

- The RL89 *is without maintenance* (gearing, reducer, planet gear are life lubricate).
- Diminution of the number of dragging components. (motor-reducer, tightener, chain,...)
- Simplification of the conveyor structure: elimination of protection covers, reducing of the side sill heights.
- Diminution of the manufacturing times of the conveyor, so a best reactivate facing the demand.
- *Facility of installation* of the conveyor on the sites (conveyors are already assembled)



Modular,

- The RL89 exist in all the dimensions identical to the free rollers of the handling market, so it become integrated naturally instead of one of them, without *no modification of your equipment* and provide an immediate *mechanisation of the conveyor*.
- It provide therefore a setting of handling equipment in *particulars environments*: protected environment (where the utilisation of lubricant is impossible), aggressive environment (dust, screenings, cuttings...), poor environment (holes, conduit, specials machines, crossing zones).
- For new conceptions, the RL89 shall allow you to conceive equipment more simples so *more reliable* and this, with a minimum room occupied (height and breadth of the conveyor or of the machine).



Security,

- The RL89, owing to its conceiving physically, *don't present any danger* for personnel who could work at proximate: no piece in movement, without exterior drawn, is nearby.
- *Low electrical consummation*, thermion protection integrated, hit protection integrated, smoothly stop, keeping in position of the RL89, at stopping point, by brake at deficiency of current (in option), F class isolation, tightness IP55 or IP 66.



Viability,

- The RL89 has been conceived for a *high resistance* about the industrial environment.
- Steel extern drawn, zinged steels or adapts revetment (vulcanisation...) in function of the extern application.
- Equipped of a tree-phase motor 230 / 400 V, the RL89 provide an *important starting torque* and guarantee an excellent keeping of its speed with its load.

The great industrial sectors concerned by the RL89 utilisation:

- Constructor of handling conveyors.
- Constructor of packing machines.
- Constructor of pallet machines
- Manufacturers of cells of robots.
- The engineering.
- The logistics research department.
- Constructors of special machines.
- The methods and maintenance services.



RL 89 utilisation's

Products handled.

- Wooden, plastic or metallic pallets getting a mass inferior or equal to 1500 Kg.
- Metallic box, containers, steel plates...

Application domains.

- Motorization of roller conveyors for isolated handling loads.
- Realisation of handling *specific solutions*: faint room occupied, reducing of the maintenance, and fast interchangeability.
- Special machines and departures of production machines (cutting up, stamping, forging...).

Products complementary.

- Fixing plate for the adjustment of the height.
- Plate for connecting box.
- *Speed variator* SPC, which allow you to program some ramps of acceleration and deceleration, for every unstable load.

Advices of installation.

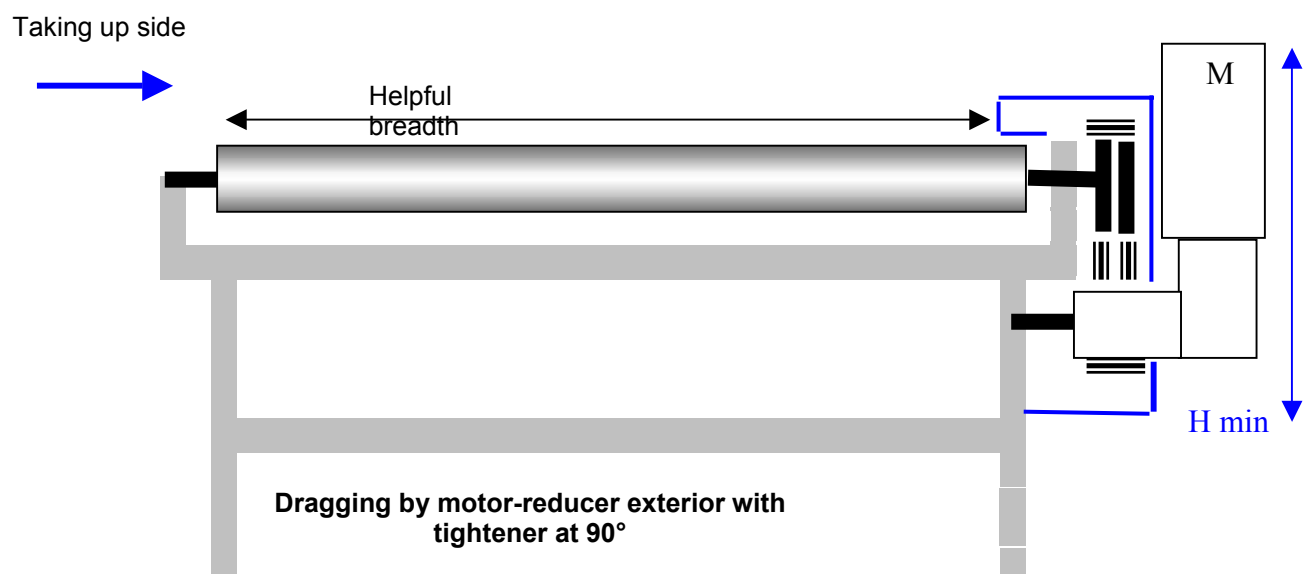
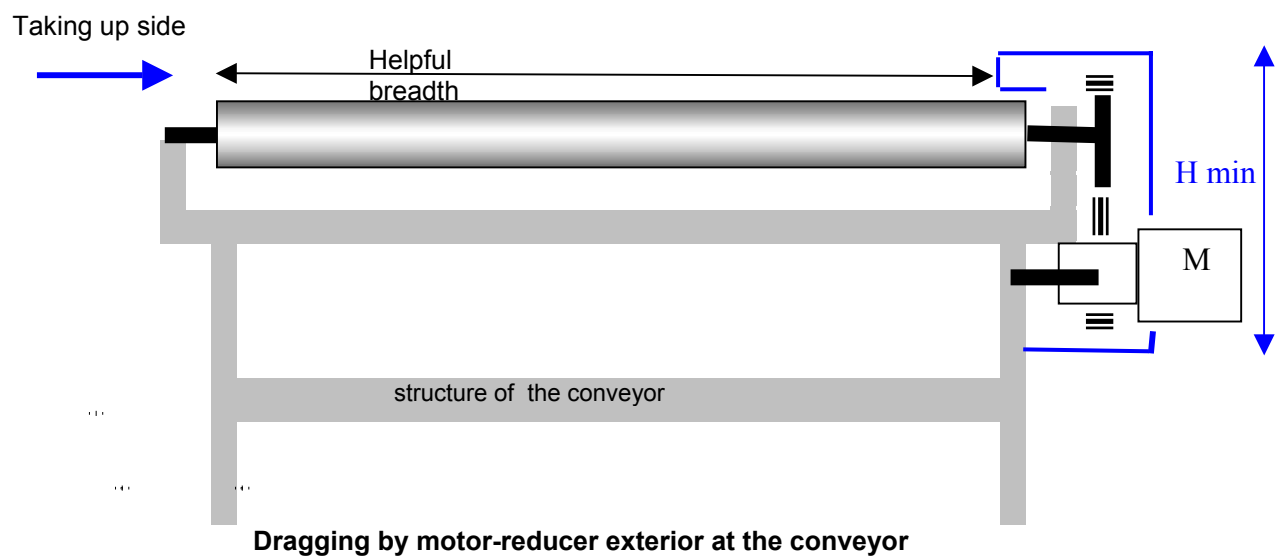
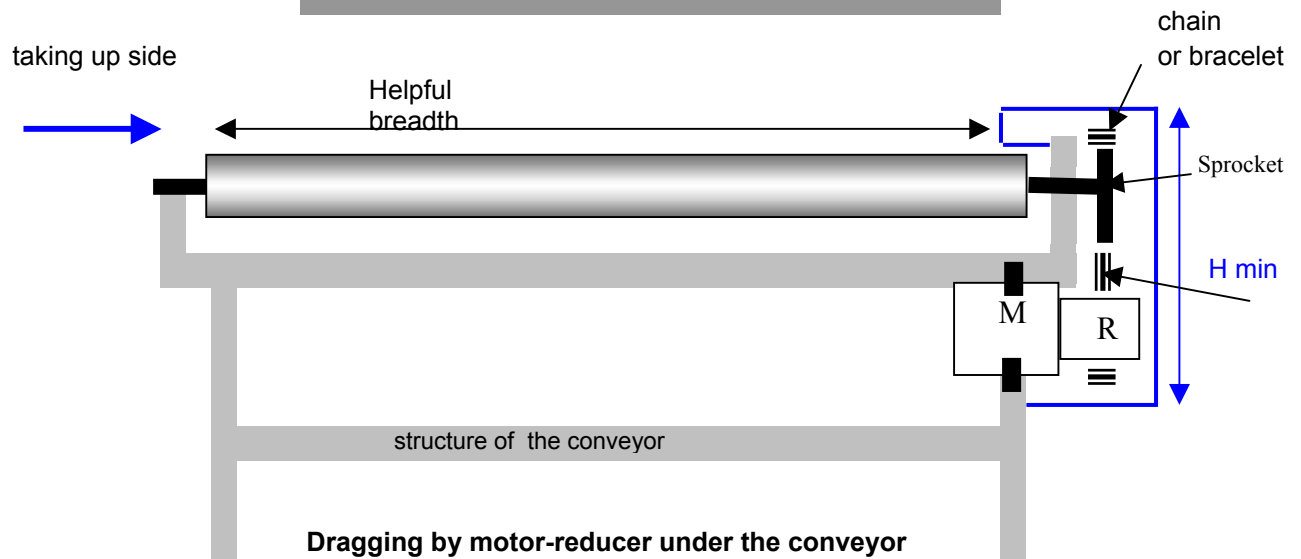
- The RL89 must be heightened between 1 and 2 mm (according to the pallet keeping) with regard to the entirety of the others rollers, in order to make sure of an optimum dragging of the load; In this way, it should use the fixing and adjustment plate specified to this effect.
- It is advertised to pass by a halt > to 2 seconds at the time of the change of revolution direction of the motor.

Applications types.

- Forklift truck with motorised conveyor.
- Turning table.
- Orthogonal transfer.
- Shuttle, transporter bridges.
- Linear and gravitate conveyor.
- Motorised crossing rollers for machines or conveyors exits.
- Specials machines.
- Handling solutions made-to-measure.
 - Linear transfer.
 - Machines exits.
 - Transfer in accumulation...



Motor-reducer or RL89, how can you make your choice?



Advantages of the solution RL89 SIREM

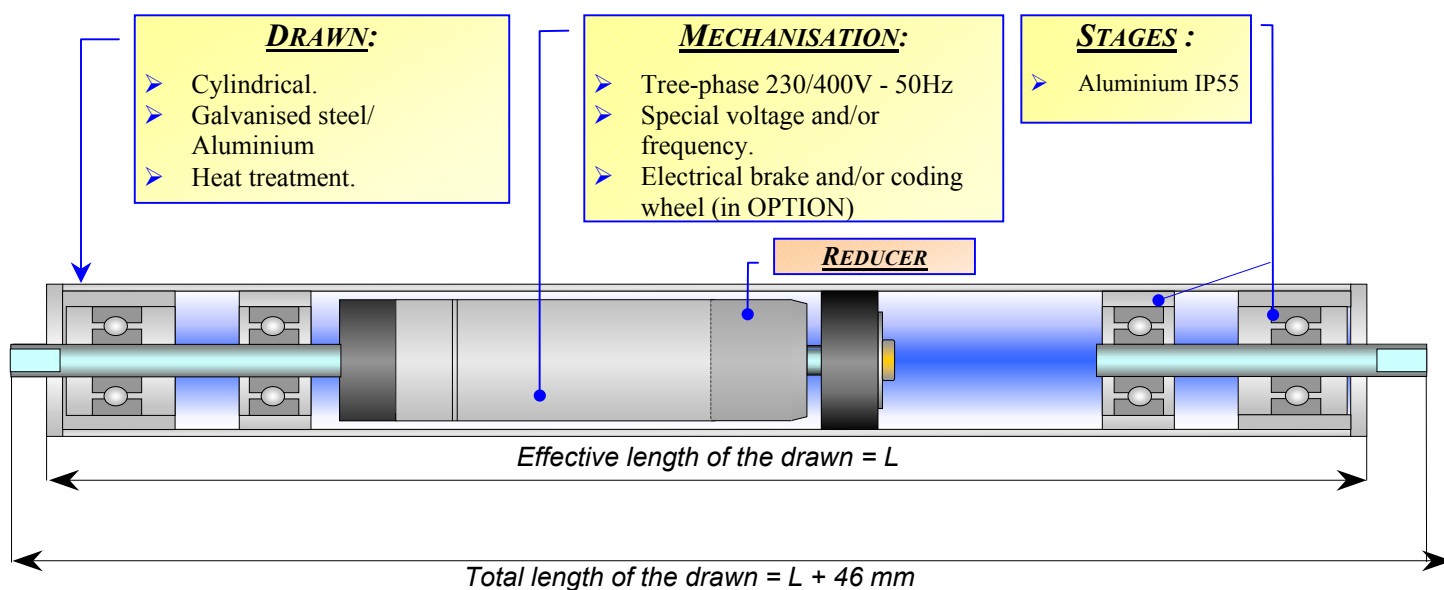
<u>BEFORE</u> : System of convoiement by motor-reducer:	Material:
	<ul style="list-style-type: none"> • Motor-reducer. • Chains. • Tightener. • Return of bevel. • Protection covers. • Motor support. • Gearing. • Side sill.
	Problems encountered:
	<ul style="list-style-type: none"> • Room needlessly occupied by the overtaking of the motor-reducer. • Maintenance of the system of traction (lubricating). • (Too) Many spare parts. • Structure of the conveyor complex. • Hour of assembling important. • Difficulties to stand or to take up pallets on the cover side. • Difficulties for the rougeing of the load with the pallets.
<u>AFTER</u> : System of convoiement by motorised rollers SIREM	Material:
 <div data-bbox="319 1944 813 2045" style="background-color: #ffffcc; padding: 5px; text-align: center; margin-top: 10px;"> Economy in the order of 30% ! </div>	<ul style="list-style-type: none"> • Motorised rollers SIREM. • Free rollers. • Side sill.
	Advantages of the RL 89
	<ul style="list-style-type: none"> • Solution more ergonomic. • Simplification of the frame structure (conveyor very low). • Reduction of the weight of the machine. • Reduction of the assembling expenses upon the site, because of a saving of time. • No maintenance (gearing, satellites, rolling are life lubricate). • Security and saving of room (intern motorization cancelling chain, gearing and motor-reducer exteriors, limiting like this the risks of industrial injuries). • Simplicity in the electric interconnection. • Great modularity of the system. • Faint consummation.



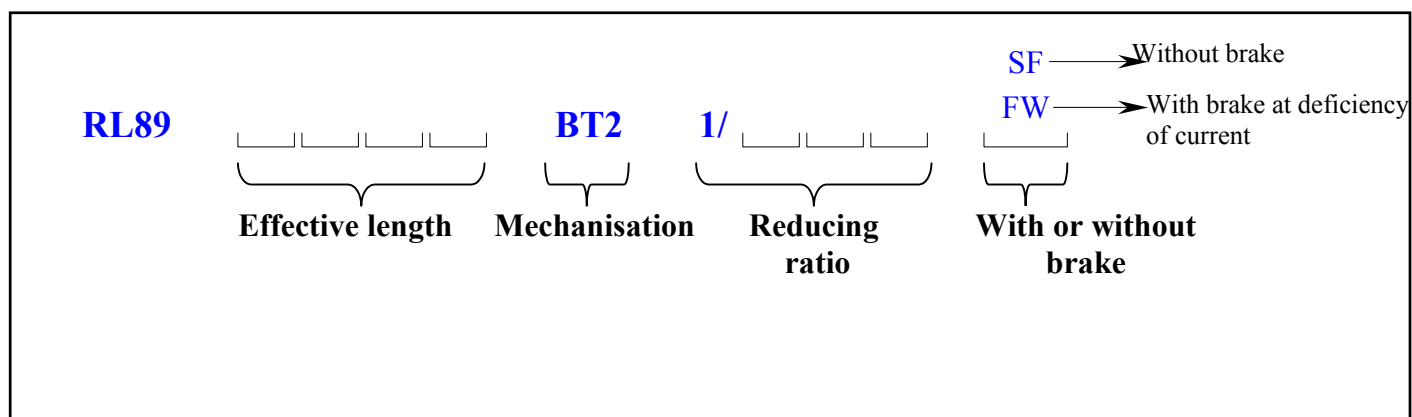
TECHNICAL DOCUMENTATION

Drawing of the motorised roller RL89

- Speed from 3.7 to 58 m / min.



- Reference / Order designation -



Designation Example:

RL89 1200 BT2 1/60 (13 m/min) FW



Generals characteristics

Technical characteristics:

- Extern diameter of the drawn : **89 mm**.
- Galvanised drawn or special treatment.
- Thickness of the drawn: **3,2 mm**.
- Diameter of the spindle: **20 mm**, the 2 extremities with a flat of 14 mm or an extremity with a flat of 14 mm and the other threaded M12 (particular application).
- Effective length of the drawn: **from 700 to 1500 mm**, other sizes possible in accordance with the utilisation type.
- Motor: Tree-phase 230/400 V --- 50Hz.
- Absorbed power of the motor: **110 W**.
- Gearing, bearings are life lubricate (without maintenance).
- Thermion protection integrated.
- Restriction of the inertia.
- Keeping of the load in position (with the RL89 FW version).
- Shock absorbers.
- Electrical brake.
- Possibilities of speed variation with the frequency variator SPC.
- Temperature of functioning: -10°C + 40°C.
- Faint sound level.
- Protection IP 55 / IP 66.
- Make-and-brake functioning (360 starting maximum by hour: 5 seconds ON – 5 seconds OFF).

Supplementary characteristics:

- Special voltage.
- Special frequency.



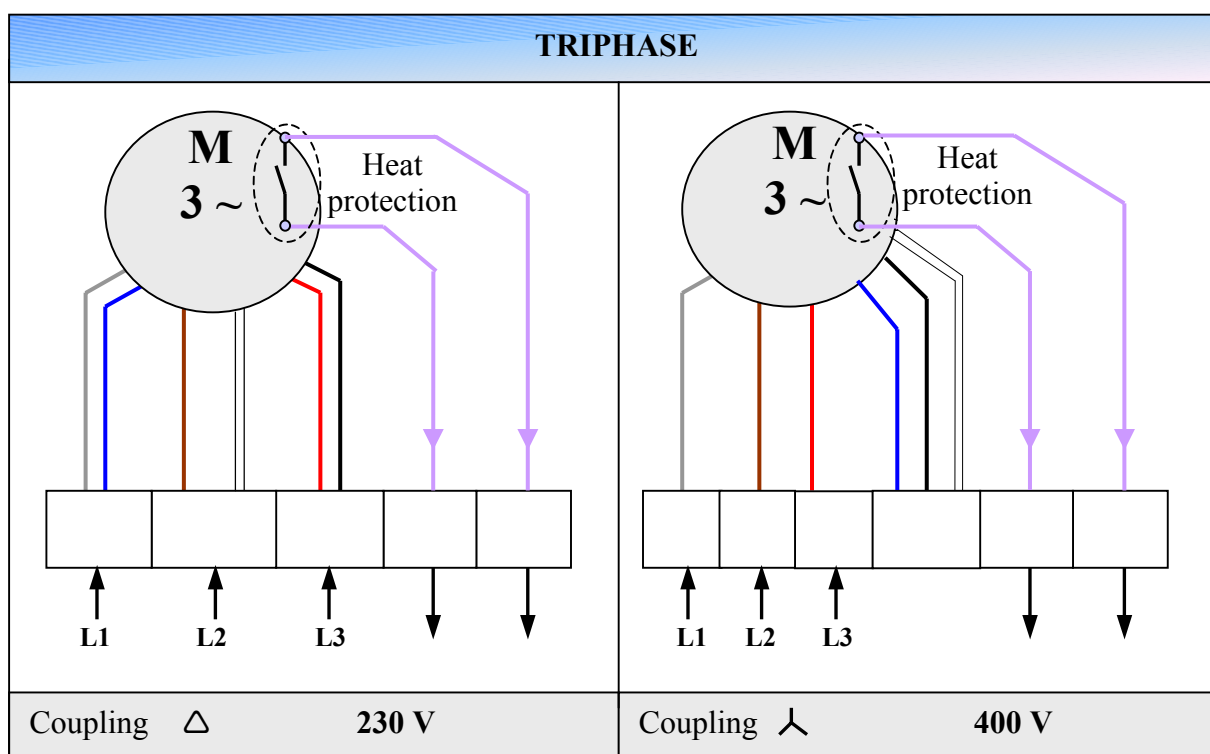
Electrical datum

Stator characteristics:

MOTOR	Designation: BT2
Triphase	•
Absorbed power	110 W
Speed	2500 tr / min
Nominal torque	0.19 N.m
Induced current under 230V – 50Hz	0.45 A
Induced current under 400V – 50Hz	0.26 A
Nominal torque / Starting torque (Nt/St)	2
Nominal current / Starting current (Nc/Sc)	2
COS φ	0.57

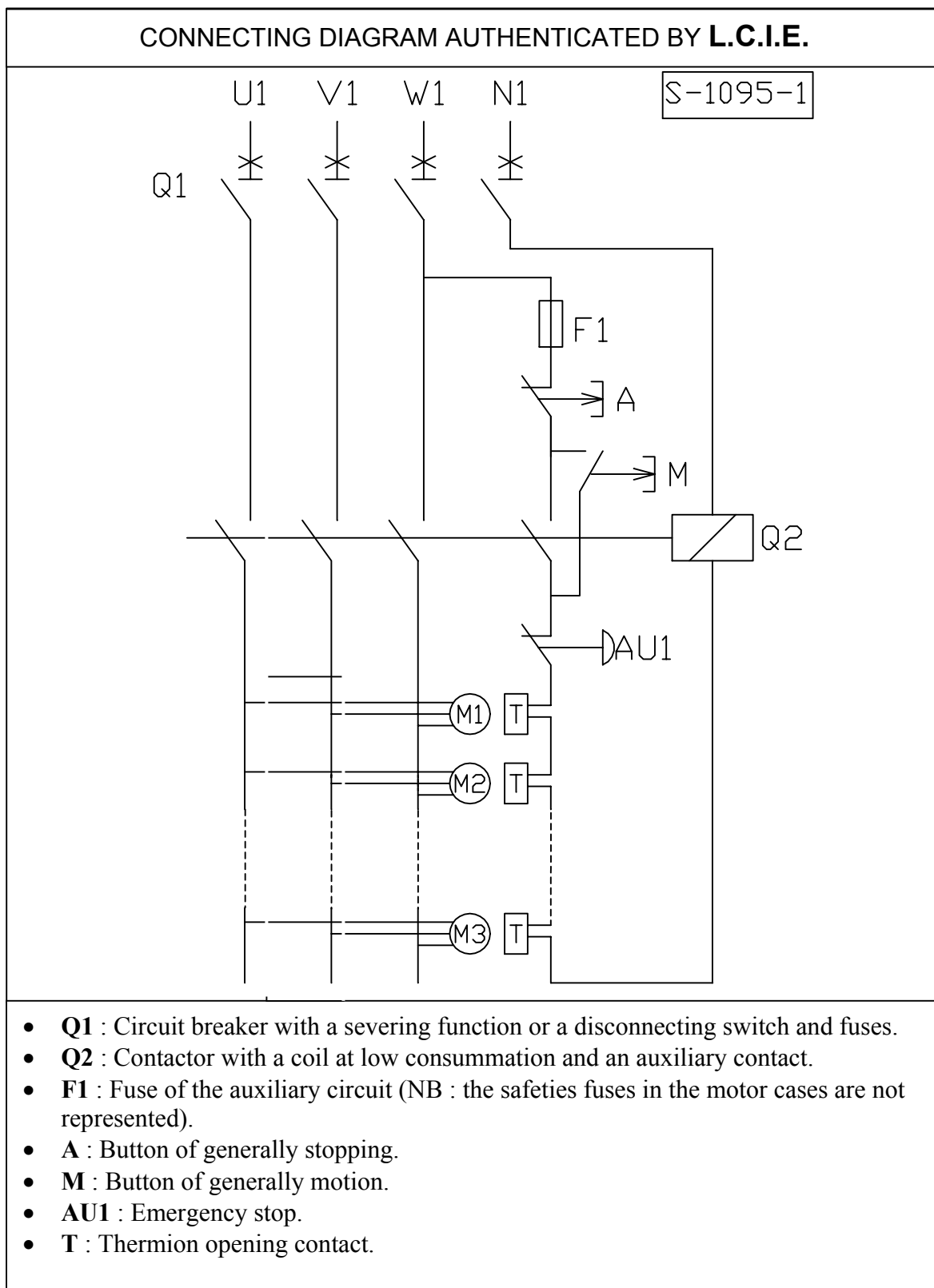
Connection diagram:

➡ See electrical diagram of LCIE in the following sheet.



L.C.I.E. diagram – RL89

This is the schema of an electric case, already connect, which you can simply set up on the conveyor in order to connect several RL89 in parallel.



RANGE OF THE MOTORISED ROLLERS *RL89*

Standard lengths (mm)						
700 - 800 - 900 - 1000 - 1100 - 1200 - 1300 - 1400						
Motor	Reducing ratio $n2 / n1$	Speed m/min	Torque (N.m)		Tangential strength (N)	
			Nominal	Starting	Nominal	Starting
RL89	1 / 216	3,6	31,8	72,5	714	1629
	1 / 152	5,2	22,4	51,0	503	1146
	1 / 135	5,8	19,9	45,3	447	1018
	1 / 107	7,3	15,8	35,9	354	807
	1 / 95	8,2	14,0	31,9	314	716
	1 / 84	9,3	12,4	28,2	278	634
	1 / 76	10,3	11,2	25,5	251	573
	1 / 67	11,7	9,9	22,5	222	505
	1 / 60	13	8,8	20,1	198	453
	1 / 53	14,8	7,8	17,8	175	400
	1 / 36	21,7	5,6	12,8	128	288

Length mm	Maximum static load Kg	Weight Kg
700	370	12,8
800	320	13,5
900	280	14,1
1000	260	14,8
1100	225	15,5
1200	210	16,2
1300	190	16,9
1400	175	17,6



Complementary receipt for the RL 89

Fixing plate.

Utilisation:

These plates are destined to hold the RL89 upon the frame of the conveyor to join up, allowing as well to regulating the height of the RL89 in relation to the free-rollers.

Dimensions (in mm):

Plate thickness: **5 mm**

