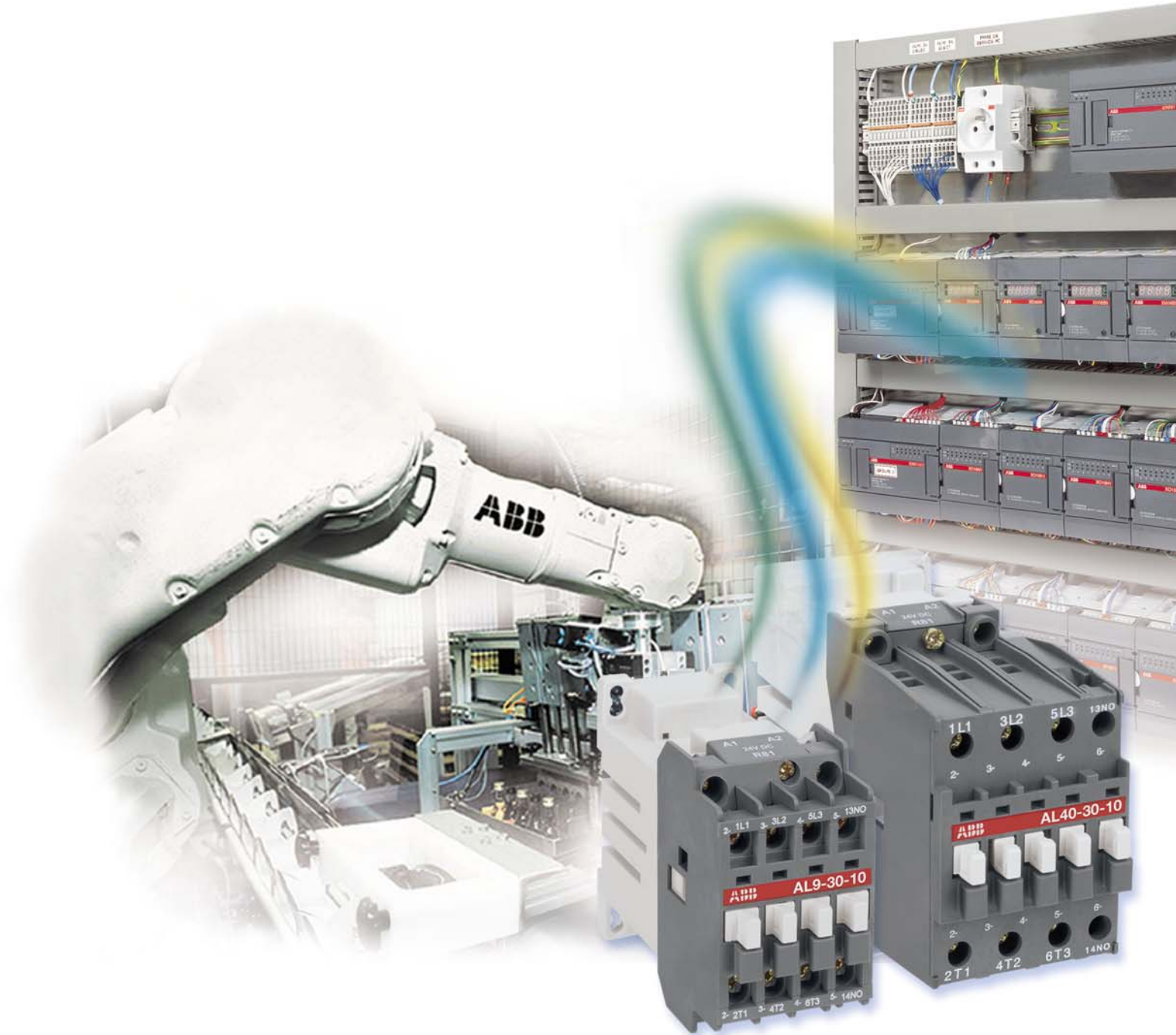


Low Consumption d.c. Operated Contactors

Automation Solution



ABB

A new range of AL contactors

"low consumption"

Contactors with a low consumption DC coil for power circuits and motor control from 4 to 18.5 kW at a voltage up to 690 V - 50 Hz and up to 440 V DC.



- **AL** contactors: 6 ratings available from **AL 9** to **AL 40** with integral auxiliary contacts on all three pole versions.

- **NL** contactor relays are available with 4 or 8 poles

Versions **TAL** and **TNL** with a large coil operating range (0.7 to $1.25 \times U_c$) complete the **AL** series.

Their conformity to traction requirements makes it a range particularly well suited to railway applications.

Installation

The **AL** contactors have a large utilisation flexibility. It is even possible to mount them in non-standard positions

Direct control by PLC

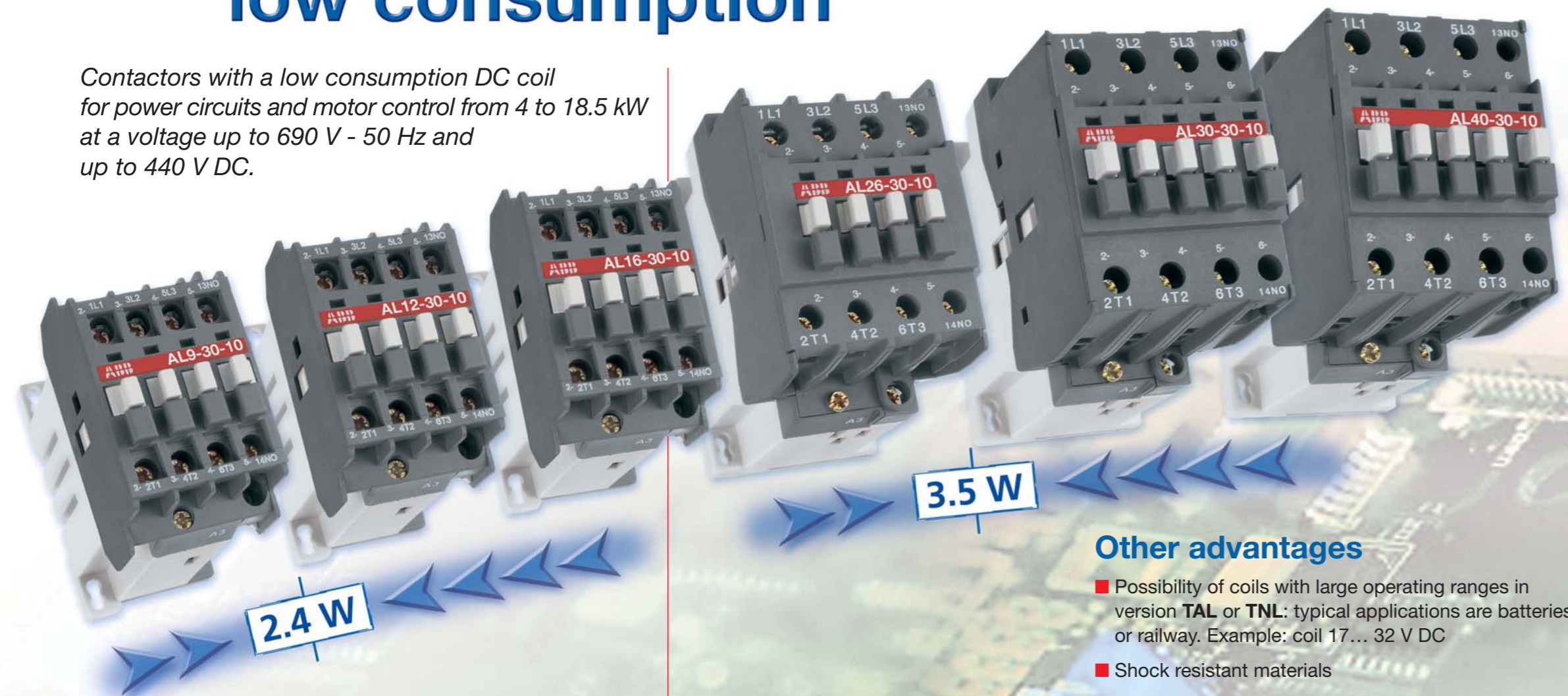
The increased use of PLCs in industry has led to a reduction of the required power necessary to control a contactor. The 2.4/3 W consumption of the **AL 9** to **AL 16** and 3.5 W of the **AL 26** to **AL 40** allows a direct control by all PLC transistor outputs without the use of an interface relay. When operated by a battery this low consumption gives a greatly increased battery life.



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Other advantages

- Possibility of coils with large operating ranges in version **TAL** or **TNL**: typical applications are batteries or railway. Example: coil 17... 32 V DC
- Shock resistant materials
- Materials selected in accordance with ecological factors. They are fully recyclable and contain no elements dangerous to health
- An insulation voltage of 1000V for the whole range
- Conformity to International standards
- Main approvals: UL, CSA, CCC (China)

Cable connections

Cable clamps and double connectors

for small cable sizes and cage clamps for larger cable sizes. This enables a large connection capacity as standard.



Other possibilities

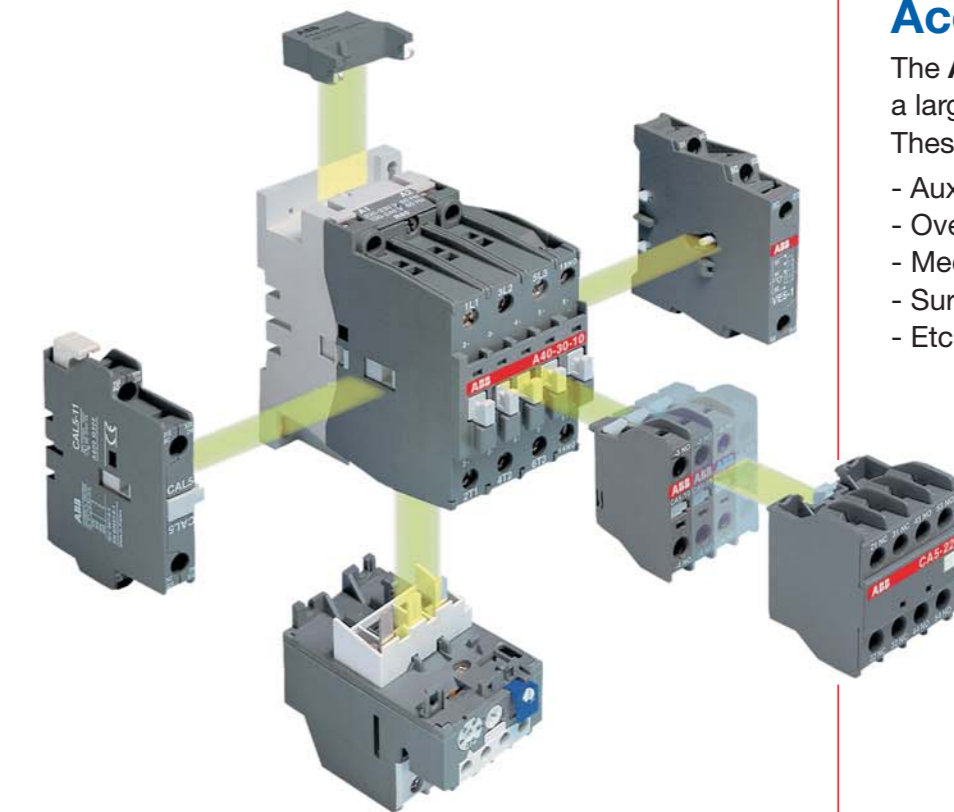
Spring terminals

For **AL 9** to **AL 16** contactors to reduce cabling time and maintenance programs.



Ring tongue terminals

Particularly adapted to applications subjected to strong vibrations i.e. traction.



Accessories

The **AL** and **A** series contactors use a large range of common accessories. These include:

- Auxiliary contacts (front or side mounting)
- Overload relays
- Mechanical / electrical interlocks
- Surge suppressors
- Etc...

ABB contactors, a global offer

All of the contactors in the **A** series are aesthetically identical. They use the same accessories whether they are front mounting, side mounting or when used in conjunction with an overload relay.

Furthermore, ABB offers a complete range of block contactors from 4 to 400 kW (AC-3) to be controlled by AC or DC current.



ISO 14001

ISO 14001

ISO 14001

AL contactor technical characteristics

3-pole contactors		AL 9	AL 12	AL 16	AL 26	AL 30	AL 40
Power AC-3 400V	kW	4	5.5	7.5	11	15	18.5
Current AC-3 / 400V	A	9	12	17	26	32	37
Current AC-1 / 40 °C	A	25	27	30	45	55	60
Coil consumption	W	2.4*/3	2.4*/3	2.4*/3	3.5	3.5	3.5
4-pole contactors		AL 9	AL 16	AL 26			
Current AC-1, 40 °C	A	25	30	45			
Contactor relays		NL 22E, NL 40E, NL 31E					

* with restrictions

ABB Motor Starter Solutions



ABB provides the complete solution to all your motor starting needs in both AC and DC. It has never been simpler to incorporate ABB products and systems into your projects.

An offer integrated in the platform

Industrial^{IT}
enabled™

ABB

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Publication
N° : TSEC101137B0202
Printed in France (D 09.03 PC)