MLR 25

CONDENSATORI PER MOTORI ASINCRONI MONOFASE
CAPACITORS FOR SINGLE PHASE INDUCTION MOTORS
CONDENSATEURS POUR MOTEURS ASYNCHRONES MONOPHASÉS

ICAR
capacità & sicurezza

MLR 25

IL CONDENSATORE

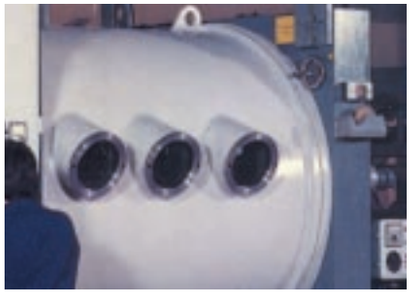
Un sottile film di polipropilene metallizzato costituisce l'essenza del componente: il dielettrico e le armature del condensatore.

THE CAPACITOR

A thin metallised polypropylene film is the heart of this component: the dielectric and the electrodes of the capacitor.

LE CONDENSATEUR

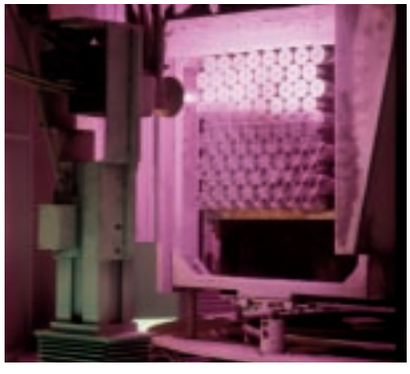
Un film très mince de polypropilène métallisé est le coeur du composant: le diélectrique et les armatures du condensateur.



INNOVAZIONE
Decenni di esperienza ed il successo ottenuto nella realizzazione di condensatori Hi-tech vengono versati nella produzione industriale quotidiana.

INTEGRAZIONE VERTICALE
Dal 1965, ICAR metallizza la totalità del film di polipropilene che utilizza. Gli elementi capacitivi, la spruzzatura, le finiture ed i collaudi vengono effettuati in loco con impianti appositamente realizzati.

CONTROLLO DEL PROCESSO
ICAR governa l'intero processo produttivo. Ampi controlli in linea garantiscono al 100% ogni componente. L'automazione dei processi riduce l'incidenza dell'errore umano.



INNOVATION
Decades of successful experience in the high tech field have resulted in consistent improvement in the daily production process.

VERTICAL INTEGRATION
Since 1965, all of the polypropylene film used has been metallized. The winding, spraying, finishing and testing are performed on-site using our specially designed equipment.

PROCESS CONTROL
ICAR controls the whole manufacturing process. Comprehensive quality tests through all stages of production ensure the high reliability of all capacitor components. The risk of human error is eliminated by complete automation.

INNOVATION
Une expérience de plusieures dizaines d'années et le succès dans la réalisation de condensateurs Hi-Tech sont au bénéfice de la production industrielle quotidienne.

INTEGRATION VERTICALE
Dés 1965 ICAR métallise la totalité du film de son besoin. Les éléments capacitifs, le schoopage, la finition et les essais sont intégrés dans notre site de production modernisé.

CONTROLE DU PROCES
ICAR maÎtrise complètement le procédé de production. Les nombreux contrôles automatisés sur ligne réduisent le taux d'erreur humaine et sont la garantie de qualité de chaque composant.

IL SUCCESSO

La maggior parte del prodotto ICAR è destinato a mercati esteri. La misura del successo ICAR è la sua presenza in oltre 50 paesi del mondo.

THE SUCCESS

The majority of ICAR capacitors are destined for the foreign market. The measure of ICAR's success is its presence in over 50 countries worldwide.

LE SUCCES

La plupart des produits ICAR sont destinés aux marchés étrangers. La présence dans plus de 50 pays du monde est la confirmation de la réussite ICAR.

CARATTERISTICHE TECNICHE GENERALI
GENERAL TECHNICAL CHARACTERISTICS
CARACTÉRISTIQUES TECHNIQUES GÉNÉRALES

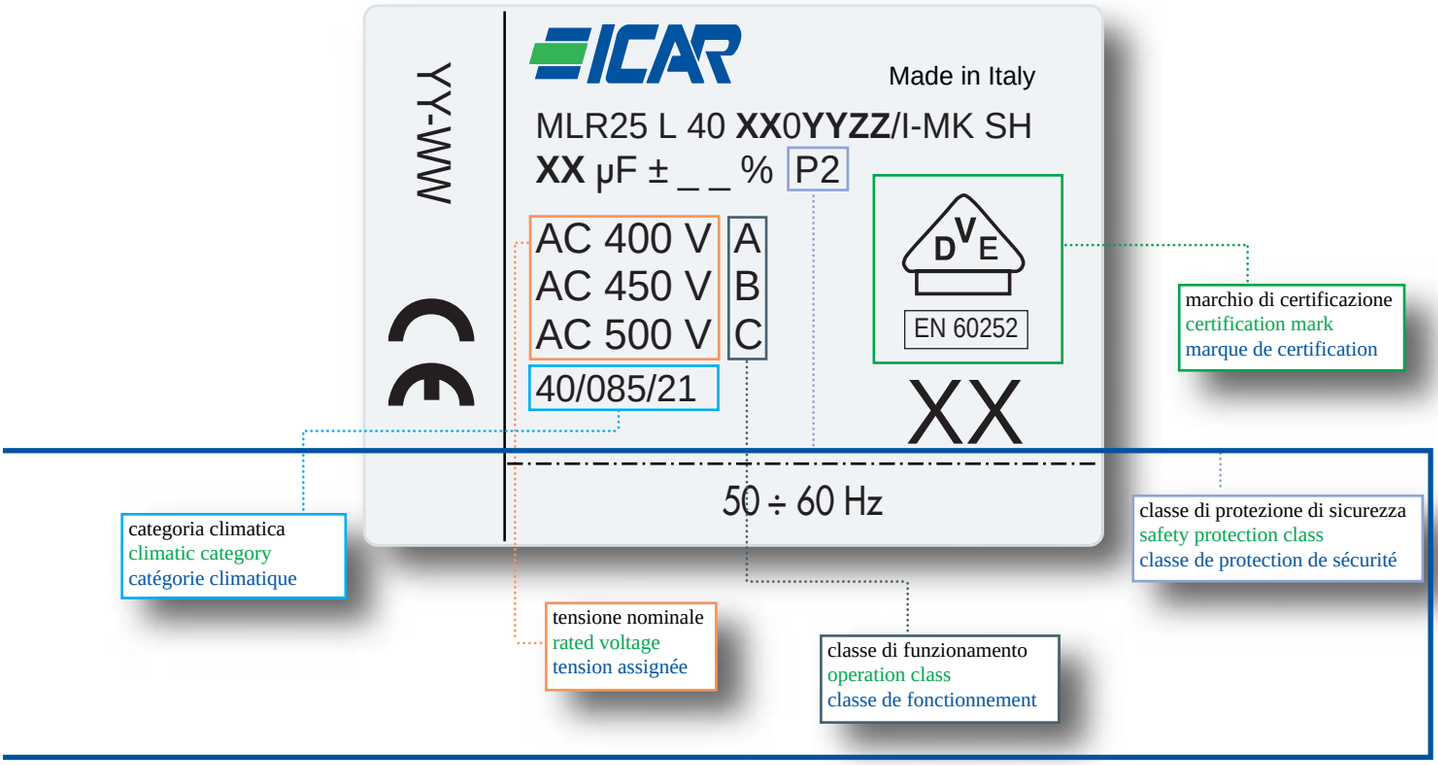
	ECOFILL	METALLICI		ECOFILL	METALLIC		ECOFILL	METALLIQUE
Custodia	plastica	alluminio	**Case**	plastic	alluminium	**Boîtier**	plastique	aluminium
Dielettrico	polipropilene	polipropilene	**Dielectric**	polypropylene	polypropylene	**Dielectrique**	polypropylène	polypropylène
Frequenza	50÷60 Hz	50÷60 Hz	**Frequency**	50÷60 Hz	50÷60 Hz	**Fréquence**	50÷60 Hz	50÷60 Hz
Tensione di prova:			**Voltage test:**			**Tension d'essai:**		
tra armature	2.15 UN (2 s)	2.15 UN (2s)	between terminals	2.15 UN (2 s)	2.15 UN (2s)	entre bornes	2.15 UN (2 s)	2.15 UN (2s)
verso massa	2.5 kV (2 s)	2.5 kV (2 s)	terminals/case	2.5 kV (2 s)	2.5 kV (2 s)	vers masse	2.5 kV (2 s)	2.5 kV (2 s)
Angolo di perdita	≤ 5 x 10-4	≤ 5 x 10-4	**Angle of loss**	≤ 5 x 10-4	≤ 5 x 10-4	**Angle de perte**	≤ 5 x 10-4	≤ 5 x 10-4
dV/dt tipico	10 (V/µs)	10 (V/µs)	dV/dt typical	10 (V/µs)	10 (V/µs)	dV/dt typique	10 (V/µs)	10 (V/µs)
Interrompibile			**Overpressure**			**Dispositif de securite**		
a sovrapressione	no	si	**safety device**	no	yes	**par surpression**	non	oui

EN 60252 STANDARD

Chiave di lettura di una targa tipo secondo la norma EN60252.

Explaination of a tipical marking according to EN60252 standard.

Clef de lecture pour une marquage typique selon la norme EN60252.



ECOFILL MLR 25 PRB

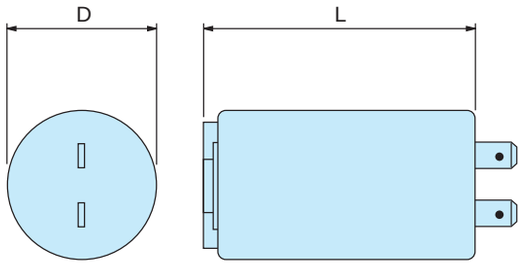
ECOFILL MLR25 PRB
40/85/21 P0
280 V A 30.000 h

ECOFILL WB40

ECOFILL WB40
40/85/21 P0
400 V B 10.000 h
450 V C 3.000 h

ECOFILL MLR 25 PRL

ECOFILL MLR25 PRL
40/85/21 P0
400 V A 30.000 h
450 V B 10.000 h
500 V D 1.000 h



µF	D mm	L mm
1.00	25*	51
1.50	25*	51
2.00	25*	51
2.50	25*	51
3.00	25*	51
3.15	25*	51
3.50	25*	51
4.00	25*	51
4.50	30	51
5.00	30	51
6.00	30	51
6.30	30	51
7.00	30	51
8.00	30	71
9.00	30	71
10.00	30	71
11.00	30	71
12.00	35	71
12.50	35	71
13.00	35	71
14.00	35	71
15.00	35	71
16.00	35	71
18.00	40	71
20.00	40	71
22.00	40	71
25.00	45	71
30.00	45	71
35.00	45	91
40.00	45	91
50.00	45	116

µF	D mm	L mm
1.00	25*	51
1.50	25*	51
2.00	25*	51
2.50	25*	51
3.00	25*	51
3.15	25*	51
3.50	25*	51
4.00	25*	51
4.50	30	51
5.00	30	51
6.00	30	51
6.30	30	51
7.00	30	51
8.00	30	71
9.00	30	71
10.00	30	71
11.00	30	71
12.00	35	71
12.50	35	71
13.00	35	71
14.00	35	71
15.00	35	71
16.00	35	71
18.00	40	71
20.00	40	71
22.00	40	71
25.00	45	71
30.00	45	71
35.00	45	91
40.00	45	91
50.00	45	116

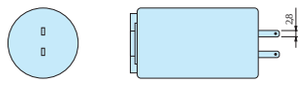
µF	D mm	L mm
1.00	25*	51
1.50	25*	51
2.00	25*	51
2.50	25*	51
3.15	30	51
3.50	30	51
4.00	30	51
5.00	30	71
6.30	30	71
7.00	30	71
8.00	30	71
9.00	35	71
10.00	35	71
11.00	35	71
12.50	35	71
14.00	40	71
16.00	40	71
18.00	45	71
20.00	45	71
22.00	45	71
25.00	45	91
27.50	45	91
30.00	45	91
31.50	45	116
35.00	45	116
40.00	45	116

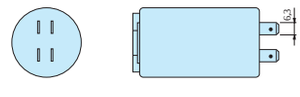
* D = 30 mm for FS and FD 6,3 execution

ICAR realizza, su richiesta del cliente, condensatori in esecuzione speciale.

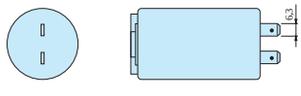
On customer's request, ICAR makes capacitors with special execution.

Sur demande du client, ICAR réalise des condensateurs en exécution spéciale.

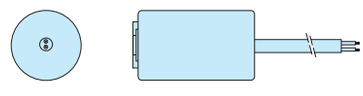




FASTON DOPPIO DOUBLE FASTON FASTON DOUBLE



FASTON SEMPLICE SINGLE FASTON FASTON SIMPLE



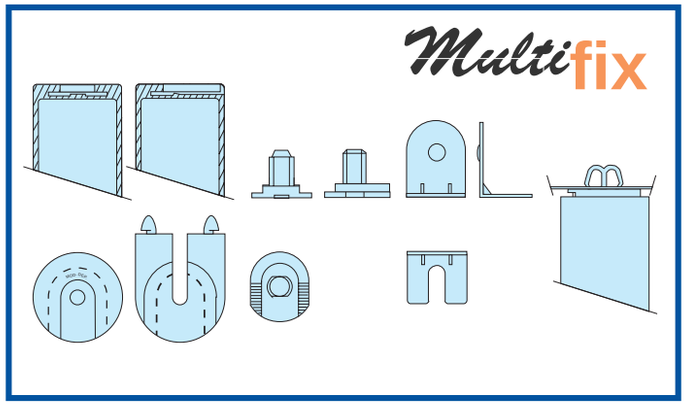
CAVO BIPOLARE TWIN CORE CABLE CABLE BIPOLAIRE

Ecofill® + Multifix

Gli ECOFILL sono i condensatori, in film di polipropilene metallizzato autorigenerabile, in resina, con custodia isolante. La semplicità realizzativa, l'automazione del processo produttivo e di controllo di qualità, rendono questi condensatori altamente affidabili per ogni applicazione.
MULTIFIX è il sistema di fissaggio brevettato che offre ampie possibilità di scelta della soluzione più idonea per ridurre i costi di montaggio.

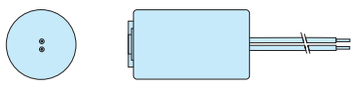
ECOFILL are self-healing, metallized polypropylene film capacitors, resin filled, plastic case. The simple design, the highly automated production process and quality control system, allow these capacitors to be highly reliable for each application.
MULTIFIX is the patented fixing system which gives the widest possibilities of choice for the cheapest mounting solution.

Les ECOFILL sont les condensateurs en film de polypropylène métallisé, en résine, avec boîtier isolant. La facilité de réalisation, l'automation des processus de production et du contrôle de qualité, permet à ces condensateurs d'être hautement affidables pour chaque application.
MULTIFIX c'est le système de fixation breveté qui donne plusieurs chances de solution pour reduire les cout de montage.

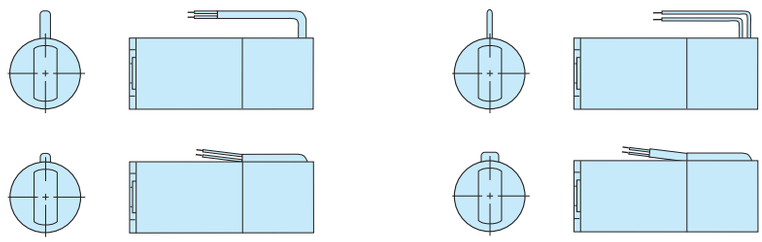


STANDARD PACKAGE

CASING SIZE	BOX QUANTITY				
	FS 2.8 - 6,3 / FD 6,3 and wires with length < 350 mm	Wires length 360 - 500 mm	Twin core cable length < 200 mm	210 - 260 mm	270 - 360 mm
25 x 51	238	238	238	238	180
30 x 51	168	168	168	168	150
30 x 71	168	150	168	150	150
35 x 71	120	120	120	120	110
40 x 71	90	90	90	90	90
45 x 71	72	72	72	72	72
45 x 91	72	72	72	72	60
45 x 116	72	60	60	60	60
50 x 116	56	50	50	50	50
55 x 116	36	36	36	36	36



CAVETTI ASSIALI WIRES CÂBLES AXIAUX



Cappuccio plastico disponibile su tutti i diametri Plastic cap available on all diameters Capuchon plstique disponible sur tous les diametres

MLR 25 U

EN 60252

MLR25 25 U

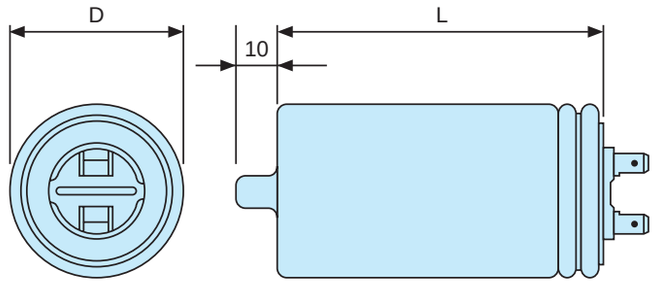
40/85/21	P2	
280 V	A	30.000 h

MLR 25 L

EN 60252

MLR25 25 L

40/85/21	P2	
400 V	A	30.000 h
450 V	B	10.000 h
500 V	C	1.000 h



µF	D mm	L mm
2.00	30	63
2.50	30	63
3.15	30	63
4.00	30	63
4.50	30	63
5.00	30	63
6.30	30	78
7.00	30	78
8.00	30	78
9.00	30	78
10.00	30	78
12.50	35	78
14.00	35	78
16.00	35	103
18.00	35	103
20.00	35	103
22.00	40	103
25.00	40	103
30.00	40	103
35.00	45	128
40.00	45	128
45.00	45	128
50.00	45	128
60.00	55	128
80.00	55	128
100.00	60	138
120.00	60	138

µF	D mm	L mm
1.00	30	63
1.50	30	63
2.00	30	63
2.50	30	63
3.00	30	63
3.15	30	63
4.00	30	63
5.00	30	78
6.00	30	78
6.30	30	78
7.00	35	78
8.00	35	78
10.00	35	78
11.00	35	103
12.00	35	103
12.50	35	103
14.00	35	103
15.00	35	103
16.00	40	103
18.00	40	103
20.00	40	103
22.00	45	128
25.00	45	128
30.00	45	128
32.00	45	128
35.00	55	128
40.00	55	128
45.00	55	128
50.00	55	128
60.00	55	128
80.00	60	138

ICAR realizza, su richiesta del cliente, condensatori in esecuzione speciale.

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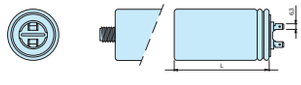
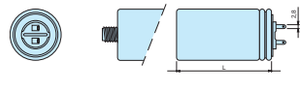
Sur demande du client, ICAR réalise des condensateurs en exécution spéciale.



FASTON DOPPIO DOUBLE FASTON FASTON DOUBLE



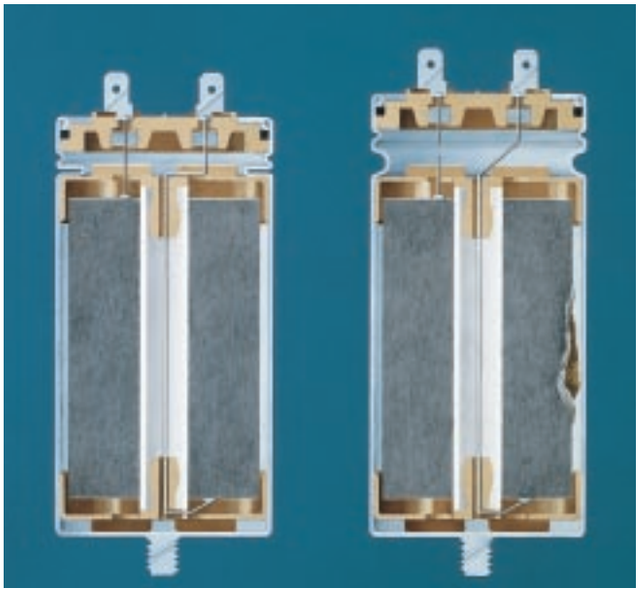
FASTON SEMPLICE SINGLE FASTON FASTON SIMPLE

SAFETY LINE

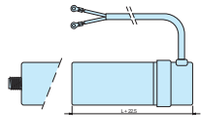
Condensatori dotati di dispositivo di sicurezza, in film di polipropilene metallizzato autorigenerabile, in custodia metallica.
L'uso di materiali tradizionalmente pregiati ed i rigidi criteri costruttivi, consigliano l'impiego di questi condensatori dove siano privilegiate la sicurezza e l'affidabilità.

Self-healing, metallized polypropylene film capacitors, with overpressure safety disconnector in metal case.
The use of traditionally valued material and the rigid manufacturing criteria, suggest the usage of these capacitors where safety and reliability are privileged.

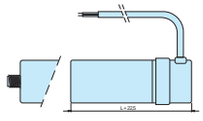
Condensateurs avec un dispositif de sécurité par surpression, en film de polypropylène métallisé, en boîtier métallique.
L'usage du matériel traditionnellement réputé et le critère rigide de construction, suggèrent l'usage de ces condensateurs où la sécurité et l'affidabilité sont priviligées.



STANDARD PACKAGE	
CASING SIZE	BOX QUANTITY All versions
30 x 63	100
30 x 78	100
35 x 78	81
35 x 103	81
40 x 103	64
45 x 128	50
55 x 128	36
60 x 138	36



CAPPUCCIO E CAVO BIPOLARE CON OCCHIELLI
CAP AND TWIN CORE CABLE WITH EYELETS
CAPUCHON ET CABLE BIPOLAIRE AVEC BOUCLES



CAPPUCCIO E CAVO BIPOLARE
CAP AND TWIN CORE CABLE
CAPUCHON ET CABLE BIPOLAIRE

In caso di intervento dell'interrompibile si ha un allungamento totale di circa 7 mm. Non utilizzare connessioni rigide.

Total elongation is about 7 mm after overpressure disconnector release. Don't make use of rigid connections.

Au cas où le dispositif a surpression interviendrait il y aura une elongation totale de 7 mm.
Ne pas utiliser aucune connexion rigide.

Fondata nel 1946, la ICAR ha rapidamente raggiunto e costantemente mantenuto una posizione di avanguardia nella ricerca e nello sviluppo di nuovi prodotti nel campo del condensatore e dei componenti per i quali il condensatore è una parte fondamentale.
Fin dai primi anni ‘60, precorrendo i tempi, la ICAR iniziò la produzione dei condensatori in film di polipropilene metallizzato, sviluppandone in proprio la metallizzazione, così da avere sotto controllo l’intero processo produttivo.
Fra i prodotti che utilizzano questa tecnologia i condensatori delle serie MLR25, sia in custodia plastica che metallica, sono appositamente realizzati per l’utilizzo su motori asincroni monofase.
Questi condensatori sono prodotti su linee robotizzate, facendo uso di tecnologie avanzate che permettono uno stretto controllo di qualità in ogni fase del processo produttivo.

Founded in 1946, ICAR rapidly acquired and constantly maintained a leading position in the research and development of capacitors and components where the capacitor is the main part.
As a forerunner ICAR started developing the metallized polypropylene capacitors in the early sixties. Moreover ICAR realized, since the beginning, the importance of developing its own film metallization facilities, in order to have the control of the process from the base polypropylene film onwards to the finished capacitor.
Among the products which utilize this technology the MLR25 series capacitors, both in plastic and in metallic case are specially designed to be used on single phase induction motors.
These capacitors are produced by advanced robotized methods and are submitted to a strict quality control involving each phase of the production process.

Fondée en 1946, la société ICAR a toujour été, et elle est encore, à l’avant-garde pour ce qui concerne la recherche et le développement de nouveaux produits dans le domaine du condensateur et des composants où le condensateur est une partie fondamentale.
A partir des années ‘60, devançants les temps, la société ICAR commença la production des condensateurs en film de polypropylene métallisé, et en developpant à son compte la métallisation pour avoir le contrôle total du processus de production.
Parmi les produits qui utilisent cette technologie les condensateurs de la série MLR25 soit en boîtier plastique que métallique sont spécialement realisés pour être utilisés sur les moteurs asynchrones monophasés.
La production de ces condensateurs est effectuée sur des lignes robotisées avec l’emploi de technologies avancées qui permettent un contrôle rigoureux de qualité pendant chaque phase du processus de production.

MLR 25/12-99/5000

N.B. I dati tecnici e dimensionali non sono impegnativi e possono essere modificati senza preavviso. ICAR spa declina ogni responsabilità per danni a persone o cose derivanti da un uso improprio dei prodotti.

The technical characteristics and the casing dimensions are not binding and can be modified without notice. ICAR spa declines any responsibility for damages to objects or people coming from unsuitable use of its products.

Les données techniques et les dimensions de les boîtes n'engagent pas, et peuvent être modifiées sans préavis. La Societé ICAR spa décline toutes responsabilitées pour dommages à choses ou personnes dérivant de l'utilisation impropre de ses produits.

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