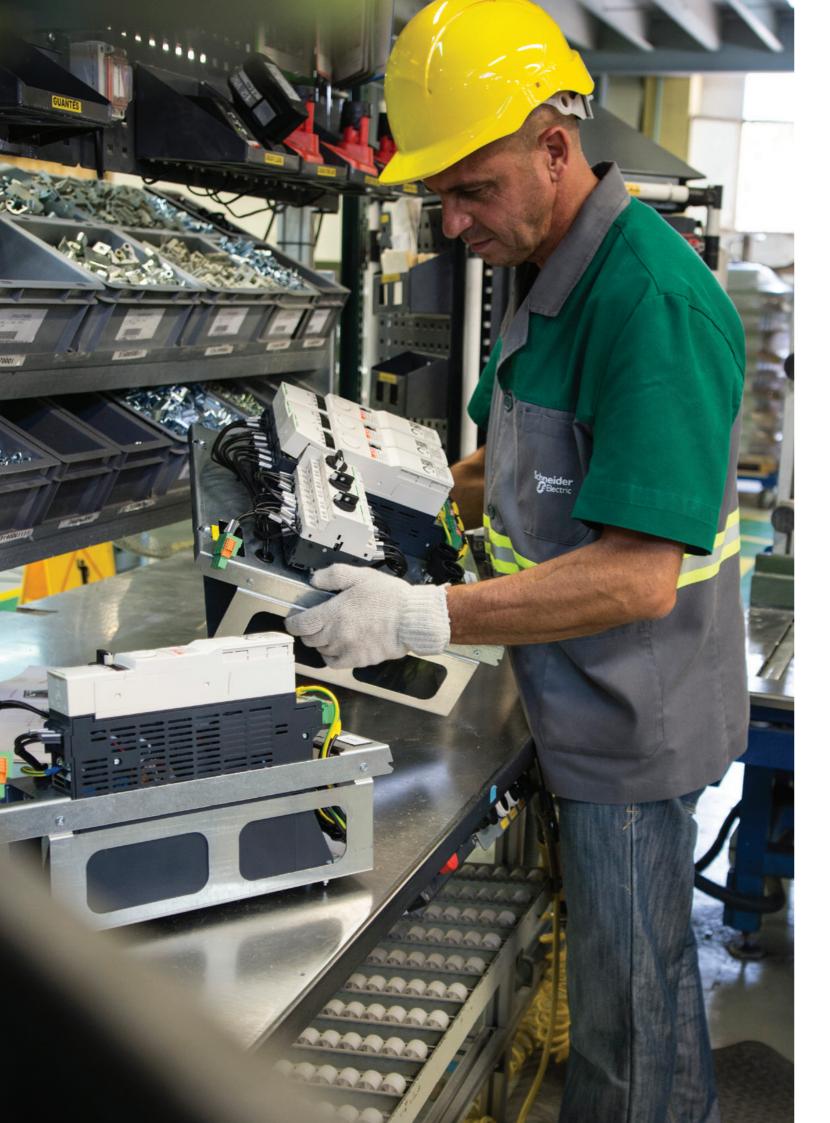


Multistandard offer for OEM applications







Improving customer satisfaction means producing industrial machines that are compliant to all international standards, more efficient, and cost effective for clients worldwide.

Now, more than ever, your choice for automation and power solutions is a key factor in developing enhanced processes at every step, from design and development to implementation and maintenance.

### Schneider Electric multistandard offer: Solutions you can trust

Schneider Electric helps you meet all global standards for industrial machinery applications with the multistandard offer for international OEMs.

A single solution that meets all your needs and every standard. That's our multistandard offer for OEMs.

Our circuit breakers and motor control units are designed to meet your needs. Deploy them for all your applications — they're ready to go.

Maintenance is minimal, but our support teams are available 24/7.

#### You order; we ship

All our multistandard product offers have a single global part number, for error-free, at-a-glance selections.

Simplicity starts with full availability. We guarantee our products will be available. You order. We ship, worldwide.

#### Quick customization

Safety, reliability, high-performance, and peace of mind.

Our rugged enclosures are designed to be assembled quickly and are fully customizable. Build your circuit protection solutions with Schneider Electric™ products and you'll have access to affordable design and engineering expertise.

### The one-stop shop that supplies, applies, complies

Multistandard offer for OEM applications

Trust Schneider Electric to give you that competitive edge over your competitors. Make us your partner as you take on new export markets.

Trust us ...

#### To supply

Simple.

One solution fits all.

for your circuit breakers, motor starters, and enclosures, look no further than Schneider Electric. We are worldwide.

Make us your one-stop shop.

#### To apply

Our solutions come to you tested and validated specifically for your application.

#### To comply

Using UL, IEC®, CCC, or CSA, our multistandard offer will always comply and set a new standard of reliability and high performance.

#### UL conformity — peace of mind certified

North America's UL is a wide-ranging product safety standard. Its certification program is complex and demanding. Schneider Electric has a team of experts who can help OEMs design panel boards to UL standards. They can guide you, or co-engineer a omprehensive solution with you. Peace of mind certified.

Wherever you are, Whatever you do, We help you do it.
Whatever your standard,

 $_{4}$ 

# Multistandard control panels are your best solution







#### Feeder circuits

- · Disconnection devices
- Incoming protective devices



#### Feeder circuits

· Branch circuit protective devices



### 3

#### Branch circuits

- Motor control and overload protection devices
- Variable-speed drives
   Supplementary protection



**Enclosures** 





**Enclosures** 







Regardless of a control panel's industrial application, its protection systems and devices must comply with applicable international standards:

- · IEC 60-204 safety of machinery
- UL 508A industrial control panel

They should also comply with Europe's CE Mark, China's CCC mark, and Canada's CSA standard. Components and component combinations that meet multiple standards are equally important to design and size for ensuring that control panels meet legal requirements across international markets.

The Schneider Electric Multistandard Offer for OEMs is a range of customizable protection solutions which you can trust to meet your needs and your customers' standards.

All our solutions have proven themselves in markets and industrial applications worldwide, they answer diverse machine applications needs spanning automation devices, elevators, hoists, lift trucks, bottling plants, ships, control systems, and more.

## Whatever your selection, you select peace of mind.

### A truly comprehensive range of feeder protection and circuit disconnect solutions

Our PowerPact™ CBs boast unrivalled reliability
for heavy-duty applications. Our Interpact™ molded case switch
protects branch circuits outside control panels, while our TeSys™ Vario
is designed for onload circuit breaking.

### Compact, cost-effective motor load protection and control

 Our direct online (DOL) starters and variable speed drive starters are easy to run and install. They need no upstream branch circuit.

#### Renowned, multiple-mount miniature circuit breakers

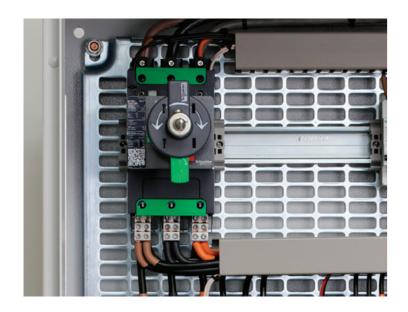
 Our miniature circuit breakers are big on safety, versatility, and trip speeds. They bring high breaking capacity to your heat and light systems.

#### Enclosures for cool, safe equipment

• Our enclosures ensure complete protection in the roughest, toughest environments and keep your equipment cool.

### Feeder protection and circuit disconnection

#### PowerPact multistandard molded case circuit breakers



#### Proven performance

Industry-leading circuit breaker innovation and protection for heavy-duty commercial and industrial applications.

#### Flexible

Full range of molded case circuit breakers from 15 A to 600 A deliver the ratings, configurations, and operations for your unique application.

#### Simple

Common catalogue numbers, standardized ratings, and a full-range of field-installable accessories make product selection, installation, and maintenance easier than ever.

#### Direct access to energy efficiency

Micrologic™ electronic trip units enable power and energy management.

#### PowerPact B Circuit Breakers

Multistandard PowerPact B circuit breakers are a 125 A molded-case circuit breaker solution offering great performance in a compact frame size. PowerPact Multistandard circuit breakers are a Schneider Electric global offering of UL listed, CSA, IEC, CCC, and EAC circuit breakers.

#### PowerPact B main features and innovations:

- Up to 125 A and 100 kA
- Fixed thermal-magnetic trip unit integrated
- · Auxiliaries externally visible
- · EverLink connectors
- · Built-in DIN rail and plate mount









Breaker type	PowerPact	BD	BG	BJ	HD	HG	HJ	JD	JG	JJ	LD	LG	LJ	LL	
Number of poles		1-4	1-4	1-4	3	3	3	3	3	3	3	3	3	3	
Current range		15 - 125	15 - 125	15 - 125	15 – 150	15 – 150	15 – 150	60 – 250	60 – 250	60 – 250	250 – 600	250 – 600	250 – 600	250-600	
Interrupting Ratings															
UL/CSA/NOM rating (kA RMS)	240 VAC	25	65	100	25	65	100	25	65	100	25	65	100	125	
(50/60 Hz AC)	480 Y/277 VAC	18	35	65											
	480 VAC*	18	35	65	18	35	65	18	35	65	18	35	65	100	
	600 Y/347 VAC**	14	18	25											
	600 VAC				14	18	25	14	18	25	14	18	25	50	
DC ratings	250 VDC				20	20	20	20	20	20					
	500 VDC								20						
IEC 60947-2 kA RMS (50/60 Hz AC) lcu/lcs	220/240 VAC	25/25	65/65	100/100	25/25	65/65	100/100	25/25	65/65	100/100	25/25	65/65	100/100	150/150	
(50/60 HZ AC) ICU/ICS	380/415 VAC	18/18	35/35	65/65	18/18	35/35	65/65	18/18	35/35	65/65	18/18	35/35	65/65	125/125	
Accessories															
Shunt Trip		•	•	•	•	•	•	•	•	•	•	•	•	•	
Undervoltage Trip		•	•	•	•	•	•	•	•	•	•	•	•	•	
Auxiliary Switches		•	•	•	•	•	•	•	•	•	•	•	•	•	
Handle Operators		•	•	•	•	•	•	•	•	•	•	•	•	•	
Mechanical Interlocks					•	•	•	•	•	•	•	•	•	•	
Handle Padlock Attachment		•	•	•	•	•	•	•	•	•	•	•	•	•	
Trip System Type															
Thermal magnetic		•	•	•	•	•	•	•	•	•					
Electronic					•	•	•	•	•	•	•	•	•	•	
Automatic Molded Case Switch		•	•	•											
Motor Circuit Protector															
Enclosures															
Dimensions (three-pole unit mount)	Height mm (in.)		137 (5.4)			163 (6.4)			191 (7.5)			340	(13.38)		
(	Width mm (in.)		81 (3.2)			104 (4.1)			104 (4.1)			140	(5.51)		
	Depth mm (in.)		80 (3.1)			111 (4.4)			127 (5.0)			168 (6.61)			
*Footooto, 400 Voo on 2 4D only															



\*Footnote: 480 Vac on 2 - 4P only \*\*Footnote: 600Y Vac on 2 - 4P only

#### Interpact IEC947-3/UL489 molded case switch

When branch circuit protection is outside the control panel, an UL 489 molded case switch alone can easily perform as the main disconnect switch. Our Interpact INSE/INJ offers all the safety that the user requires.

Designed for maximum performance and safety, this comprehensive, homogeneous range operates with numerous accessories and auxiliaries from 40A up to 400A.



#### TeSys Vario IEC947-3/UL508 load break switch

This switch should be installed on the load side of a motor branch circuit protection system.

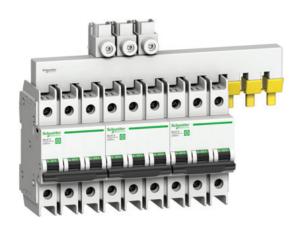
TeSys Vario rotary switch disconnectors from 12 to 175 A are suitable for the onload making and breaking of resistive or mixed resistive and inductive circuits where frequent operation is required.

· A variety of operating mechanisms

### Branch circuit and control circuit protection

#### Multi 9 miniature circuit breakers





In addition to the PowerPact molded case circuit breakers offer, IEC 947-2/UL 489 miniature circuit breakers and UL 248 fuses should be used to protect loads like power transformers, the power supply, appliances, and heating and lighting.

Multi 9™ C60 is the first extensive range of DIN rail-mounted miniature circuit breakers to be UL 489 listed for branch circuit protection.

Other Multi 9 devices are UL recognized as supplementary protectors suitable for applications where branch circuit protection is already provided or not required. Multi 9 C60 products also have IEC ratings. Other IEC-rated products complement the UL line up to 125 A at up to 440 VAC.







is rated for 125 amperes



	6				10					Į.	6				<b>3</b>	
Breaker type	Multi 9	C60BP and C60BPR - UL489							C60SP - UL1077						UL 1077 C60H-DC	
Number of poles		1 2 3						1 2 3					3	1 2		
Current range		0.535A	4063A	0.535A	4063A	0.535A	4063A	0.535A	4063A	0.535A	4063A	0.535A	4063A	0.5-40	0.5-40	
Interrupting Ratings																
UL/CSA/NOM rating	120 Vac	14	10					14	10							
(kA RMS) (50/60 Hz AC)	120/240 Vac															
(50/60 HZ AC)	240 Vac	14	10	14	10	14	10	14	10	14	10	14	10			
	277 Vac	10						10	5							
	480 Y/277 Vac			10		10				10	5	10	5			
	480 Vac															
	600 Y/347 Vac															
	600 Vac															
DC ratings (UL)	48 Vdc													5	5	
	60 Vdc	10	10											5	5	
	65 Vdc							10	10							
	125 Vdc			10						10				5	5	
	250 Vdc													5	5	
	500 Vdc														5	
IEC 60947-2	240 V	15	15	30	30	30	30	15	15	30	30	30	30	10	20	
(50/60 Hz AC)	415 V	3	3	15	15	15	15	3	3	15	15	15	15			
	440 V			10	10	10	10			10	10	10	10		10	
DC ratings (IEC)	60 Vdc	20	20					20	20							
Accessories																
Shunt Trip					•		•		•		•			•	•	
Undervoltage Trip			•		•		•		•		•		•	•	•	
Auxiliary Switches			•		•	•	•		•		•		•	•	•	
Handle Operators					•	•	•		•		•		•	•	•	
Mechanical Interlocks		•			•		•		•		•		•	•	•	
Handle Padlock Attachment		•	•		•	•	•		•	•	•		•	•	•	
Enclosures																
Dimensions	Height mm (in.)		Rin	Box lug: ' g tongue terr	103 (4.XX) minal: 127 (X	(.XX)				81 (	3.19)			81 (3	3.19)	
	Width mm (in.)	18 (0	0.71)	36 (	1.42)	54 (2	2.13)	18 (0	0.71)	36 (	1.42)	54 (	2.13)	18 (0.71)	36 (1.42)	
	Width mm (in.)			76 (	3.00)					76 (3.00)				76 (3.00)		



DF10	DFCC	DF14	DF22
IEC UL (UL recognized)	IEC UL (UL listed)	IEC UL (UL recognized)	IEC UL (UL recognized)
AC electrical ratings: For Cat. Nos. US10 and CMS10: 30 A, 800 V ac max, 200 kA current withstand. DC electrical ratings: For Cat. Nos. US10 and CMS10: 30 A, 1000 V dc max, 100 kA	AC electrical ratings: 30 A, 800 V ac max, 200 kA current withstand. DC electrical ratings: 30 A, 1000 V dc max,	These devices are rated 800 Volts AC and 1000 Volts DC, maximum: - CMS14 and US14 is rated for 50 amperes - CMS22 and US22 is rated for	These devices are rated 800 Volts AC and 1000 Volts DC, maximum: - CMS14 and US14 is rated for 50 amperes - CMS22 and US22

100 kA current withstand. 125 amperes

10 11

current withstand.

### Motor load protection and control

#### Direct online starter



There are several solutions for individual circuit motor loads (whether direct online or drive starters). The most efficient are IEC947-4-1/ UL508 type-E or type-F self-protected combination motor controllers. These combinations are built on multistandard components. They are demonstrably the most compact, the safest, and the most reliable solution for protecting and controlling motors. They can be implemented on direct on line (DOL) starters and variable speed drive starters and do not require any upstream branch circuit protection device.



Find all information about tested, validated architectures in our "TeSys Motor Starter Solutions for the North American Market" brochure. (Data Bulletin 8536DB0901)



#### TeSys D Green:

- · The new contactor with innovative coil
- · Best in class coil consumption
- Only 4 product references per rating covering 24-500V AC and DC and additional special offer (24V DC BBE) for PLC application
- Easy to select, install and operate





#### TeSys GV2P motor starters – TeSys LC1D contactors

TeSys GV2P with GV2GH7 line spacer for one motor starter or with GV1G09 terminal block and GV2G busbars for several motor starters — File UL E164871.

Maximum horsepower ratings						Manual Self protected starter	Overload trip range (A)	Type of contactor required	SCCR (kA)		
Single-I	Phase	Three-F	hase						480Y/277V	600Y/347V	
120 V	240 V	208 V	240 V	480 V	600 V						
-	-	-	-	-	-	GV2P01	0.10 - 0.16	LC1D09	100	50	
								LC1D12	100	-	
-	-	-	-	-	-	GV2P02	0.16 - 0.25	LC1D09	100	50	
								LC1D12	100	-	
-	-	-	-	-	-	GV2P03	0.25 - 0.40	LC1D09	100	50	
								LC1D12	100	-	
-	-	-	-	-	-	GV2P04	0.40 - 0.63	LC1D09	100	50	
								LC1D12	100	-	
-	-	-	-	-	0.5	GV2P05	0.63 - 1	LC1D09	100	50	
								LC1D12	100	-	
-	1/10	-	-	0.75	0.75	GV2P06	1 - 1.6	LC1D09	100	50	
								LC1D12	100	-	
-	1/5	0.5	0.5	1	1.5	GV2P07	1.6 - 2.5	LC1D09	100	50	
								LC1D12	100	-	
1/8	1/3	0.75	0.75	2	3	GV2P08	2.5 - 4	LC1D09	100	50	
								LC1D12	100	-	
0.25	0.5	1	1.5	3	5	GV2P10	4 - 6.3	LC1D09	100	50	
								LC1D12	100	-	
0.5	1.5	2	3	5	7.5	GV2P14	6 -10	LC1D09	100	50	
								LC1D12	100	-	
0.75	2	3	3	10	10	GV2P16	9 - 14	LC1D12	42	-	
								LC1D18	50	50	
1	3	5	5	10	15	GV2P20	13 - 18	LC1D12	42	-	
								LC1D18	50	50	
1.5	3	5	7.5	15	20	GV2P21	17 - 23	LC1D25	50	50	
								LC1D32	42	-	
2	-	7.5	7.5	15	20	GV2P22	20 - 25	LC1D25	50	50	
								LC1D32	42	-	
								201202	72		







#### TeSys GV3P UL 508 motor starters – TeSys LC1D contactors

TeSys GV3P with GV3G66 line spacer and GVAM11 short circuit signaling contact for one motor starter — File UL E164871.

Standard motor ratings for motors 50/60 Hz (HP)				Manual self-protected starter	Overload trip range (A)	Type of contactor required	SCCR (kA)			
Single-l	Phase	Three-Phase				Type E			480Y/277V	600Y/347V
120 V	240 V	208 V	240 V	480 V	600 V					
0.5	1.5	3	3	7.5	10	GV3P13	9 - 13	LC1D18, D25, D32, D40A, D50A or D65A	65	25
0.75	2	5	5	10	15	GV3P18	12 - 18	LC1D18, D25, D32, D40A, D50A or D65A	65	25
1.5	3	5	7.5	15	20	GV3P25	17 - 25	LC1D25, D32, D40A, D50A or D65A	65	25
2	5	7.5	10	20	25	GV3P32	23 - 32	LC1D32, D40A, D50A or D65A	65	25
3	-	10	-	25	30	GV3P40	30 - 40	LC1D40A, D50A or D65A	65	25
-	7.5	10	15	30	40	GV3P50	37 - 50	LC1D50A or D65A	65	25
5	10	15	20	40	50	GV3P65	48 - 65	LC1D65A or 80	65	25

Note: GV2P, GV3P are only UL 508 certified, not viewed as circuit breakers by UL.



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### Motor load protection and control

#### Variable-speed driver starter

A proven, compact, and cost-effective, multistandard variable-speed drive starter solution that complies with UL508C and UL508A is to combine a TeSys GV IEC 947-2/UL508 type-E manual self-protected combination motor controller with Altivar™ drives.





Power rating Drive model <sup>2</sup>			Line reactor Minimum value	Type E combination motor controller					
(kW)	(HP)		(mH)	Model <sup>1</sup>	Rating at 500V (A)	SCCR (A)	Rating		
208/230\	V-Single-Pl	hase							
0.18	1/4	ATV320U02M2x	2.5	GV2P08	4	65	Under 240Vac		
0.37	1/2	ATV320U04M2x	2.5	GV2P10	6.3	65			
0.55	3/4	ATV320U06M2x	2.5	GV2P14	10	65			
0.75	1	ATV320U07M2x	2.5	GV3P13	12	65			
1.1	1-1/2	ATV320U11M2x	1	GV3P18	18	65			
1.5	2	ATV320U15M2x	1	GV3P25	25	65			
2.2	3	ATV320U22M2x	1	GV3P25	25	65			
4	5	ATV320U75M2x	0.4	GV3P50	50	65			
5.5	8	ATV320D11M2x	0.3	GV3P65	65	65			
7.5	10	ATV320D15M2x	0.2	HxL36090 <sup>3</sup>	90	65			
480V-Thi	ree-Phase								
0.37	1/2	ATV320U04N4x	12	GV2P07	2.5	65	Under 480Y/277Vac		
0.55	3/4	ATV320U06N4x	12	GV2P07	2.5	65			
0.75	1	ATV320U07N4x	12	GV2P08	4	65			
1.1	1-1/2	ATV320U11N4x	6.8	GV2P08	4	65			
1.5	2	ATV320U15N4x	6.8	GV2P10	6.3	65			
2.2	3	ATV320U22N4x	5	GV2P14	10	65			
3	4	ATV320U30N4x	3	GV2P14	10	65	_		
4	5	ATV320U40N4x	3	GV3P13	12	65			
5.5	8	ATV320U55N4B	2.5	GV3P18	18	65			
7.5	10	ATV320U75N4B	1.5	GV3P25	25	65			
11	15	ATV320D11N4B	1.2	GV3P32	32	65			
15	20	ATV320D15N4B	0.8	GV3P40	40	65			

- 1: Large spacing adapter GV2GH7 to be added to GV2, GV3G66 to GV3
- 2: replace x by B or C
- 3: replace x by the right short circuit current rating

For 208/230V range use x=D for 25kA, G for 65kA, J for 65kA, L for 65kA.

### Leading edge enclosures

Spacial steel enclosures, Thalassa polyester enclosures, Climasys™ thermal management cabinets ... For many years, Schneider Electric has sold a wide range of industrial enclosures through two major brands: Himel and Sarel. Today, by integrating our brands, services, production, and our customer assistance services together under the Schneider Electric banner, we can offer OEMs unbeatable partnership opportunities.

#### The highest quality is our mission

Service quality: Our total quality approach covers every stage of product design, from manufacturing and ordering through delivery. We embrace our customers' needs as the focal point of all our processes, from new product development to product delivery from our logistics centres.

Customization quality: Extensive experience driving projects to a successful completion, combined with high technology tools (3D laser machines, special laser marking, etc.) enable us to obtain high quality results when customizing and adapting enclosures to your requirements. Quality according to International Standards: UL, BV, DNV, GL, GOST, etc.















ISO 9001 and ISO 14001 Certified



Keeping machinery in working order, wherever it's installed, is our key concern!

#### Global customer support

Ready to serve you wherever you are:

- Local after-sales service at any location worldwide
- Reduced worldwide after-sales costs
- Improved risk management across export activities
- Time saving

#### Co-engineering and customization

No matter the integration or developmental constraints you face when optimizing equipment to suit your machine production, we can provide professional services personalized to your needs and budget. Our customized equipment and integrated solutions allow you to upgrade your production or logistics.





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### A Schneider Electric TVD solution

Multistandard offer for OEMs, like all Schneider Electric solutions, includes tested, validated, and documented architectures, products, and services.

#### Tested

All possible configurations have been tested and results approved by certified third-party labs.

#### Validated

All solutions live up to Schneider Electric global solutions values of safe, reliable, efficient, productive, and green as proven by testing on platforms that reproduce various customer environments over the entire solution life cycle. The life cycle management of each component is guaranteed.

#### Documented

In addition to Schneider Electric customer support, customers receive a complete set of user guides, training, and toolboxes to ensure they achieve all of the benefits they expect from the solution.

### Your challenges ...

- · Reduce time-to-market
- · Improve performance
- · Develop your business
- ... while reducing your costs.

### Our solution

Schneider Electric multistandard offer allows you to deploy one machine design worldwide. It helps you improve your logistic process while meeting standards and customs regulations.

It means having the solutions for your machine design and manufacturing near you and spare parts, services, and support near your customers, worldwide.

#### Make the most of your energy<sup>™</sup>

#### Schneider Electric Industries SAS

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