



**AD-PE** Series  
**V80-V90** Aluminium  
**Ex d IIB**  
Fuel Dispenser Line

۰۲۱-۶۶۲۶۸۹۲۰  
۰۲۱-۶۶۲۷۸۹۰۴  
۰۹۱۲۰۸۶۶۱۴۰

سام تجهيز

samtajhiz.com



فروش انواع الكتروموتور  
و ديگر تجهيزات صنعتي



**RAEL** MOTORI  
ELETTRICI



## **EXPLOSION PROOF ELECTRIC MOTOR FOR FUEL DISPENSING APPLICATION**

RAEL MOTORI ELETTRICI, SINCE ITS INCEPTION IN THE LATE 60S, HAS ASSEMBLED MORE THAN A MILLION OF EXPLOSION PROOF ELECTRIC MOTORS FOR FUEL DISPENSER SOLD ALL OVER THE WORLD.

WE LIKE TO THINK OF IT NOT AS A GOAL BUT AS OF A FURTHER STEP IN A PROCESS OF GROWTH, DURING WHICH WE KEPT INVESTING IN NEW MANUFACTURING PROCESSES AND IN DEVELOPING NEW PRODUCTS TO MEET THE INCREASING DEMAND AND EXPECTATIONS WHILE REMAINING COMPETITIVE ON THE GLOBAL MARKET.

THIS JOURNEY SO FAR HAS GIVEN US THE OPPORTUNITY TO OFFER TODAY'S MANUFACTURERS OF FUEL DISPENSING EQUIPMENT A TOP QUALITY ELECTRIC MOTOR SPECIFICALLY DESIGNED FOR THEIR APPLICATION.

OUR CURRENT RANGE OF ATEX-IEC EX CERTIFIED AD-PE MOTORS, TOTALLY MODERNIZED, COMPRISE SINGLE AND THREE PHASE AC MOTOR, ALUMINIUM BODY, SSR, FULLY EMBEDDED CAPACITORS AND CENTRIFUGAL SWITCH, TO NAME A FEW, AND LAST BUT NOT LEAST ARE PROUDLY MADE IN ITALY.

## **MAIN CHARACTERISTIC**

EXPLOSION PROOF MOTORS ACCORDING TO EUROPEAN STANDARDS EN 60079-0 AND EN 60079-1

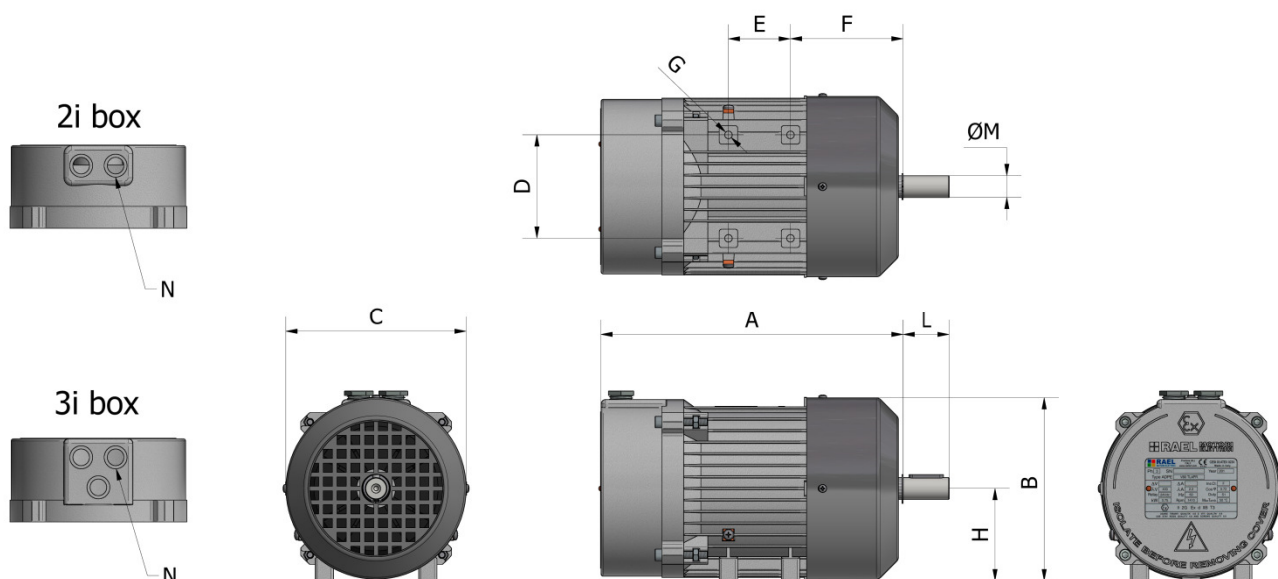
### **V80 – SHAFT HEIGHT 80MM:**

- 3 PHASE ASYNCHRONOUS MOTOR, SQUIRREL CAGE
- IP55, S1 OR S3 DUTY (NON VENTILATED)
- SSR/POWER RELAY/CONTACTOR INSIDE MOTOR HOUSING
- 2 OR 3 CABLE ENTRIES
- RC FILTERS
- THERMAL PROTECTION WITH AUTOMATIC RESET
- 2Z OR SEALED 2RS SELF LUBRICATED BALL BEARING

### **V90 – SHAFT HEIGHT 90MM:**

- SINGLE PHASE OR THREE PHASE ASYNCHRONOUS MOTOR, SQUIRREL CAGE
- IP55, S1 OR S3 DUTY (NON VENTILATED)
- SSR/POWER RELAY/CONTACTOR INSIDE MOTOR HOUSING
- START/RUN CAPACITOR INSIDE MOTOR HOUSING
- CENTRIFUGAL SWITCH
- 2 OR 3 CABLE ENTRIES
- RC FILTERS
- THERMAL PROTECTION WITH AUTOMATIC RESET
- 2Z OR SEALED 2RS SELF LUBRICATED BALL BEARING
- CUSTOM NON VENTILATED VERSION SUITABLE FOR VAPOUR RECOVERY PUMPS

## V80 MOTOR – THREE PHASE



A	B	C	D	E	F	H	G	L	M	N
264	160	160	90	54	98	80	M8	30/40**	14/19**	M22

\* ALL LENGTHS +/- 1MM

\*\* CUSTOM MADE ALSO, MAX 19MM DIAMETER

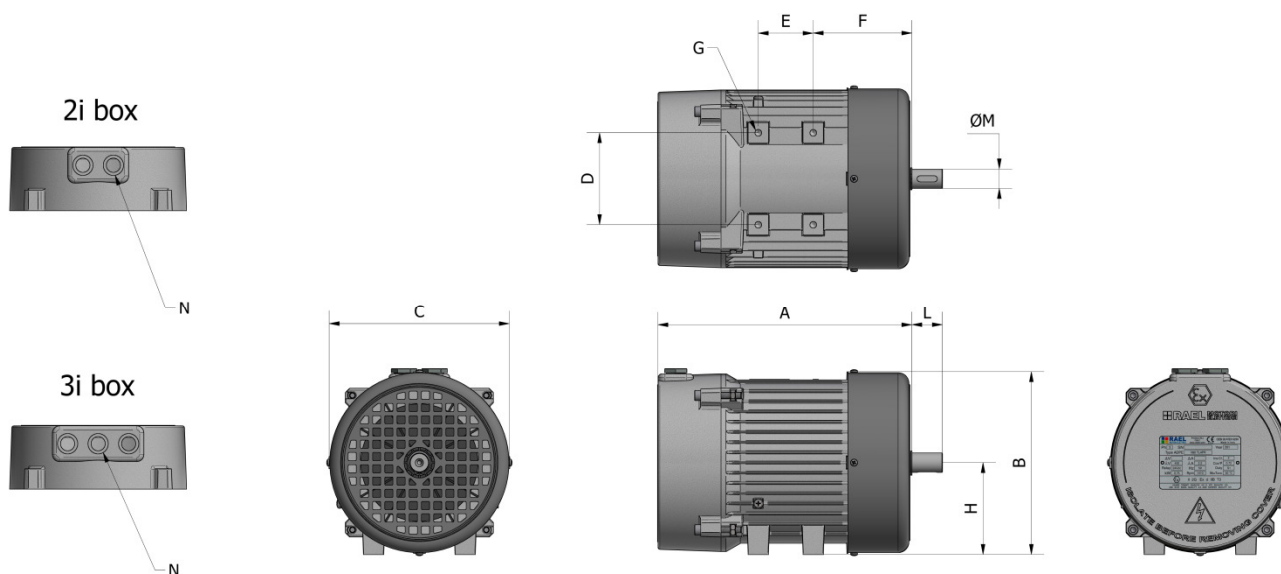
### THREE PHASE AC ELECTRICAL DATA

TYPE	POWER		POLES	V	HZ	A (400V)	A (230V)	RPM	COSF	DUTY
	KW	HP								
V80	1,00	1,36	2	230/400	50	2,6	4,5	2790	0.75	S1
V80	0,55	0,75	4	230/400	50	1,7	2,9	1420	0,75	S1
V80	0,65	0,88	4	230/400	50/60	1,95	3,4	1400	0,6	S1
V80	0,75	1,00	4	230/400	50/60	2,2	3,8	1410	0,72	S1
V80	1,00	1,36	4	230/400	50/60	3,3	5,8	1410	0,63	S1

### THREE PHASE AC WITHOUT VENTILATION

TYPE	POWER		POLI POLES	V	HZ	A (400V)	A (230V)	RPM	COSF	DUTY
	KW	HP								
V80	0,25	0,35	2	230/400	50	0,8	1,4	2800	0,7	S3
V80	0,37	0,50	2	230/400	50	0,9	1,6	1420	0,68	S3
V80	0,25	0,35	4	230/400	50	0,9	1,6	1410	0,7	S3
V80	0,37	0,50	4	230/400	50	1,0	1,8	1420	0,68	S3

## V90 MOTOR - THREE PHASE



A	B	C	D	E	F	H	G	L	M	N
250	180	180	90	54	98	90	M8	30/40**	14/19**	M22

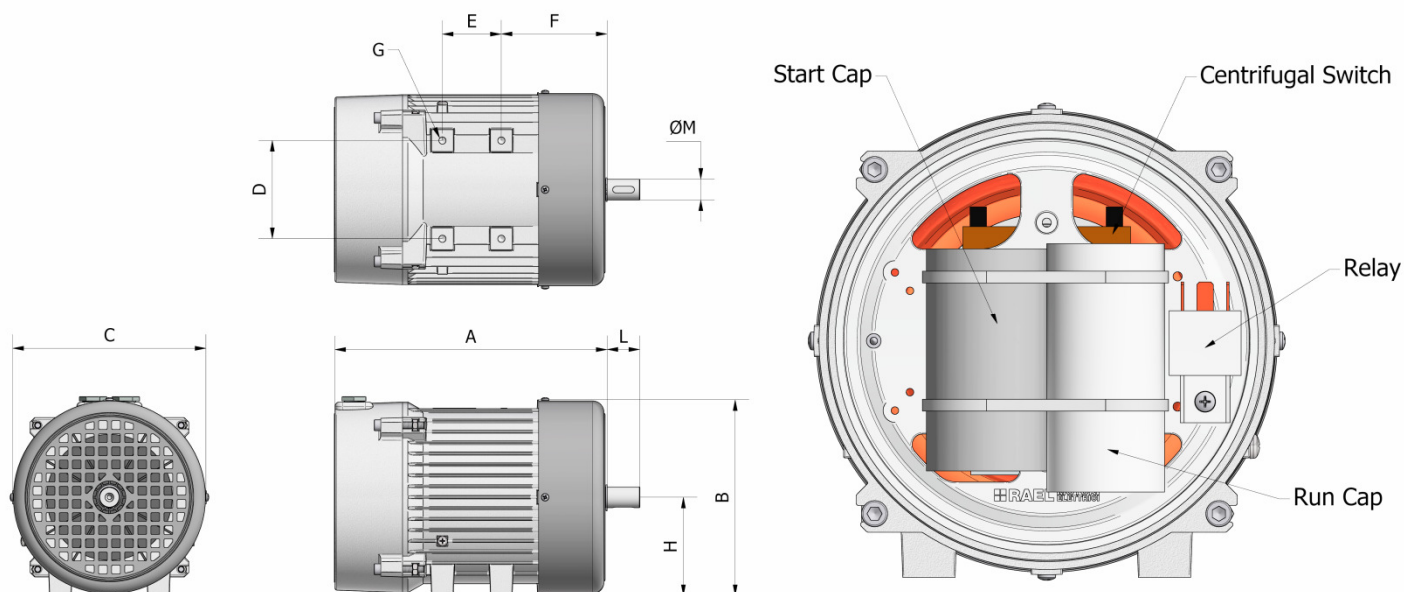
\* ALL LENGTHS +/- 1MM

\*\* CUSTOM MADE ALSO, MAX 19MM DIAMETER

### THREE PHASE AC ELECTRICAL DATA

TYPE	POWER		POLES	V	HZ	A (400V)	A (230V)	RPM	COSF	DUTY
	KW	HP								
V90	1,50	2,00	2	230/400	50/60	3,5	6,0	2810	0,8	S1
V90	2,20	3,00	2	230/400	50/60	5,2	8,9	2850	0,8	S1
V90	0,75	1,00	4	230/400	50/60	1,8	3,1	1420	0,8	S1
V90	1,10	1,50	4	230/400	50/60	2,9	5,0	1420	0,7	S1
V90	1,50	2,00	4	230/400	50/60	3,9	6,7	1390	0,8	S1
V90	0,55	0,75	6	230/400	50/60	1,8	3,1	920	0,7	S1
V90	0,75	1,00	6	230/400	50/60	2,1	3,6	900	0,7	S1
V90	1,00	1,36	6	230/400	50/60	2,8	4,8	930	0,78	S1

## V90 MOTOR - SINGLE PHASE



A	B	C	D	E	F	H	G	L	M	N
250	180	180	90	54	98	90	M8	30/40**	14/19**	M22

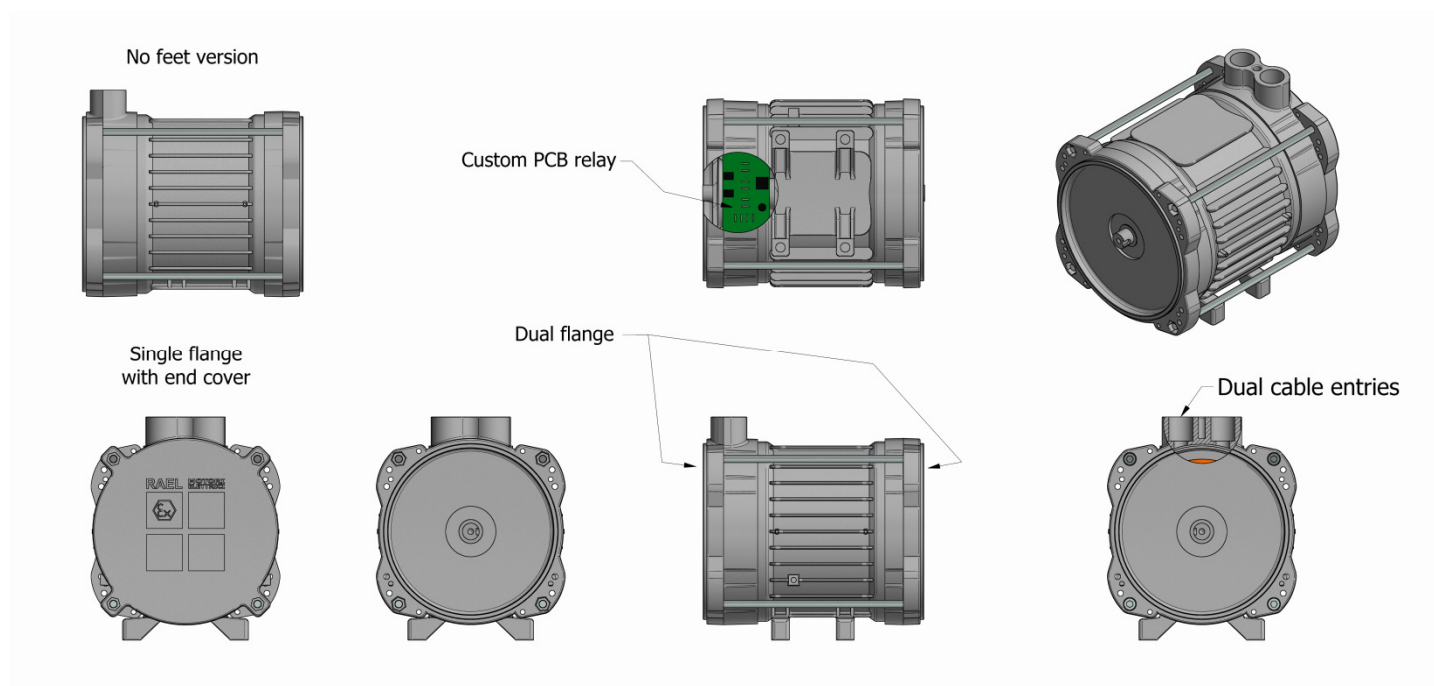
\* ALL LENGTHS +/- 1MM

\*\* CUSTOM MADE ALSO, MAX 19MM DIAMETER

### SINGLE PHASE AC ELECTRICAL DATA

TYPE	POWER		POLES	V	HZ	A	RUN CAP μF (450V)	START CAP μF (250V)	RPM	COSφ	DUTY
	KW	HP									
V90	1,00	1,36	2	230	50/60	6,0	25	200	2900	0,90	S1
V90	1,50	2,0	2	230	50/60	9,0	45	200	2860	0,90	S1
V90	0,55	0,75	4	230	50/60	3,8	20	100	1430	0,95	S1
V90	0,75	1,00	4	230	50/60	4,3	25	100	1410	0,90	S1
V90	1,00	1,36	4	230	50/60	5,7	30	100	1410	0,95	S1
V90	1,5	2,0	4	230	50/60	11,0	30	100	1430	0,90	S1
V90	0,75	1,00	6	230	50/60	6,2	25	60	920	0,90	S1

## CUSTOM VAPOUR RECOVERY SOLUTIONS OR DIRECT COUPLING



**AD-PE MOTORS ARE CUSTOMIZABLE, TO FACE THE MOST CHALLENGING INSTALLATION PROCESS.**

**-SPECIAL FLANGE AND SHAFT DESIGN BASED ON CUSTOMER REQUIREMENT.**

**-CUSTOM METAL BRACKET IN ADDITION TO THE STANDARD ALUMINIUM MOUNTING POST**

**-CUSTOM DESIGNED PULLEY**

**-FOR SINGLE PHASE MOTORS, FULLY INTEGRATED START/RUN CAPACITORS WITH ELECTRONIC SWITCH AND RELAY (24VDC OR 230VAC)**

## GALLERY





## MOTOR MARKING

EXPLOSIVE ATMOSPHERE TYPE				MOTOR MARKING				
AREA CLASSIFICATION		PRESENCE OF EXPLOSIVE ATMOSPHERE	PROTECTION	CATEGORY	GROUP	TYPE OF PROTECTION	GAS GROUP	TEMPERATURE CLASS
GAS	ZONE 1	PROBABLE	HIGH	II	2G	EX d	IIB	T3
	ZONE 2	IMPROBABLE	NORMAL	II	2G	EX d	IIB	T3

### MOTOR NAMEPLATE

Predosa (AL) ITALY www.raelsrl.com 0722 EUT 14 ATEX 1171 X IECEX EUT 14 0009 X Made in Italy

Ph  SN  Year

Type ADPE  IP

ΔV  ΔA  Ins.Cl.

人V  人A  Cos φ

Relay  Hz  Duty

kW  Rpm  Tamb.°C

II 2G Ex d IIB T3 Gb

USARE VITI QUALITÀ 8.8  
USE SCREWS QUALITY 8.8

	MARKING OF CONFORMITY IN COMPLIANCE WITH THE EUROPEAN DIRECTIVES
0722	NUMBER OF NOTIFIED BODY THAT GIVES THE PRODUCT QUALITY ASSURANCE NOTIFICATION
	SPECIFIC MARKING OF EXPLOSION PROTECTION
II	GROUP (SURFACE PLANTS DIFFERENT FROM MINES)
2	CATEGORY (HIGH PROTECTION)
G	EXPLOSIVE ATMOSPHERE FOR THE PRESENCE OF FLAMMABLE GAS, VAPOUR OR MIST (GAS)
EX d	TYPE OF PROTECTION FOR EXPLOSIVE ATMOSPHERE FOR THE PRESENCE OF FLAMMABLE GAS
IIB	GAS GROUP
T3	TEMPERATURE CLASS OF THE MOTOR (GAS)
GB	EQUIPMENT PROTECTION LEVEL
TAMB.	MAX AND MIN AMBIENT TEMPERATURE
EUT 14 ATEX 1171	TYPE ATEX CERTIFICATE NUMBER
IECEX EUT 14 0009X	TYPE IECEX CERTIFICATE NUMBER

- MOTORS MARKED WITH GAS GROUP IIB ARE SUITABLE ALSO FOR GAS GROUP IIA.
- MOTORS WITH TEMPERATURE CLASS T3 (GAS) ARE SUITABLE FOR TEMPERATURE CLASSES T2, T1.
- ROOM TEMPERATURE RANGE: -40°C; +60°C

### MARKINGS EXAMPLE

- MOTOR FOR SURFACE PLANT IN EXPLOSIVE ATMOSPHERE (NON MINING)
- ZONE 1
- EXPLOSIVE ATMOSPHERE CONSISTING OF A MIXTURE WITH AIR OF DIETHYL ETHER (GAS GROUP IIB IGNITION TEMP. 160°C)
- MAX AMBIENT TEMPERATURE 60°C

**MARKING II 2G EX d IIB T3 GB IS SUITABLE FOR SUCH APPLICATION**

## CERTIFICATES

RAEL MOTORI ELETTRICI S.R.L. IS CERTIFIED ISO9001:2000 FROM FEBRUARY 2003 AND AS WE MANUFACTURE MOTORS COMPLYING WITH DIRECTIVE 2014/34/EU WE ALSO HAVE BOTH THE 'PRODUCT QUALITY ASSURANCE NOTIFICATION' AND THE CE CERTIFICATES REGARDING THE MOTORS .

ALL MOTORS ARE ATEX AND IECEX CERTIFIED

ALL MOTORS ARE TR-CU CERTIFIED

MOTOR TYPE	TYPE CERTIFICATE NUMBER	TYPE OF CERTIFICATE
V 80 MOTOR	TUV IT 11 ATEX 012 X	ATEX
	IECEX EUT 14 0009 X	IECEX
	TC RU C-IT.AA87.B.00193	TR-CU
V90 MOTOR	EUT 14 ATEX 1171 X	ATEX
	IECEX EUT 14 0009 X	IECEX
	TC RU C-IT.AA87.B.00193	TR-CU



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