Programmable Controllers

COMPANY

DELTA ELECTRONICS INC
31-1 Shien Pan Rd
Kuei San Industrial Zone
Taoyuan City, 333 Taiwan

E206327

View model for additional information

Accessories, Model(s): DPA-CBL, QPS-CBL

Accessories, communication interfaces, Model(s): DVPCP02-H*, DVPDT02-H*, DVPPF02-H*

Accessories, I/O extensions for DI/DO units, Model(s): DVPAETB*

Accessories, temperature sensors, Model(s): DVP08TC-H*

Accessories: I/O extension, Model(s): AHBP00M2-5A

Accessory I/O extensions, Model(s): AHXBP04M1-5A

Accessory I/O extensions, "AH Series", Model(s): AHAADP followed by 01-09, followed by EF, followed by -5A.

Accessory Open type RS-485 Repeater, Model(s): IFD5710

Accessory Open type, "AH Series", Model(s): AHBP followed by 00 to 12, followed by numbers, alphabets or blank. I/O extension for DI/DO units, Model DVPAETB, followed by numbers, alphabets or blank. Fiber module, AHAADP followed by 01-09, followed by EF, followed by -5A.

Analog IO units, Model(s): AH01AD*, AH01DA*, AH01LC*, AH01XA*, AH02AD*, AH02DA*, AH02LC*, AH02XA*, AH04AD*, AH04DA*, AH04LC*, AH04XA*, AH06AD*, AH06DA*, AH06LC*, AH06XA*, AH08AD*, AH08DA*, AH08LC*, AH08XA*, AH16AD*, AH16DA*, AH16LC*, AH16XA*

Analog IO units, Model(s): AS02 followed by AD, DA, LC, RTD, TC, or XA, followed by -A, -B, -C or any numbers or alphabets, may be followed by blank

Analog IO units, Model(s): AS04 followed by AD, DA, LC, RTD, TC, or XA, followed by -A, -B, -C or any numbers or alphabets, may be followed by blank

Analog IO units, Model(s): AS06 followed by AD, DA, LC, RTD, TC, or XA, followed by -A, -B, -C or any numbers or alphabets, may be followed by blank

Analog IO units, Model(s): AS08 followed by AD, DA, LC, RTD, TC, or XA, followed by -A, -B, -C or any numbers or alphabets, may be followed by blank

Area Scan 3D Camera, Model(s): DMV-TI300GSM, DMV-TI300-SSG

Area Scan Camera, Model(s): DMV-C series (followed by a, followed by b, followed by G, followed by c, followed by d) where a can be "C or V or L or X", where b can be "300, 400, 800, 1M6, 2M1, 3M2, 5M0, 6M3, 12M or 20M", where c can be "C or M", where d can be "005, 008, 016, 023, 036, 055, 060, 075, 120 or 290"

CNC Controller, Model(s): NC500E series followed by H or blank, followed by -F, -M, -L or -C, followed by I, P or S, followed by E, followed by blank, followed by T, E or S

CNC Controller, Model(s): NC50E series followed by H, M or blank, followed by -M, -L, -F or -W, followed by E, followed by A-Z, 1-9 or blank

Communication accessory devices, Model(s): RTU-EN01

Communication interface units, Model(s): COA02, DMV1000-80GX, DNA02, DVPCOPM-SL, DVPEN01-SL, DVPPF02-SL, DVS005*, DVS008*, DVS016*, ENA01-EIP, ENA01-MOD, RTU-485, RTU-DNET, RTU-PD01

Communication interface units, keypad accessories, Model(s): DMV1000-KEY

Communication interfaces, listed accessories, Model(s): DVPSCM*

Computer Numerical Control, Model(s): NC followed by 200 or 300 or 310 or 311, followed by A, P or AH, followed by MS, MI, LI, GI, GS or GP, maybe followed by additional suffix(es) or number(s).

Control modules, Model(s): DCH1000A, DVP10PM00M*, DVP12SA10R*, DVP12SE11R*, DVP12SE11T*, DVP14SS11R*, DVP14SS11R2*, DVP14SS11T*, DVP14SS11T2*, DVP20PM00D*, DVP20PM00M*, DVP28SS211S, ELCPC12NNAR

Control modules, Model(s): DVP followed by 12, 14, 20 or 28 followed by SS2 or SX2, followed by 11, followed by R, T or S.*

Control modules, Model(s): DVP followed by 14, 16, 24, 30, 32, 20, 40, 60 or 80 followed by ES, EX, SS or EC, may be followed by 2, followed by 00, 01, 10 or 11, followed by R, RM, S, T, RE, TE.*

Control modules, Model(s): DVP may be followed by any alphanumeric, followed by 16, 20, 32, 40, 48, 60, 64 or 80, followed by EH, followed by 00, followed by R, T or M.*

Control modules, Model(s): DVP may be followed by any alphanumeric, followed by 10, 24, or 28, followed by SX or SV, followed by 11 or 211, followed by R or T

Control modules, Model(s): DVP followed by 12, 10, 15, 32, or 50 followed by SA, SC, MC, or ES, may be followed by 2, followed by 11, followed by R, S, T, or P.*

Control Modules, Model(s): DVP26SE11R, DVP26SE11S, DVP26SE11T, DVP28SA211R, DVP28SV11T2, DVP28SV11TC, DVPX10MC11T, DVPX12SE11T, DVPX28SV11R2, DVPX40EH00T3, Model DVPX14SS211R and DVPX14SS211T.

Control Modules, "--", Model(s): DVP28SA211S, DVP28SA211T

Control units, Model(s): DVP28SS211R, DVP28SS211T

Counter module Unit, Model(s): Model AS followed by 02, followed by HC, followed, followed by –A.

CPU Unit, Model(s): AHCPU521-DNP, AHXCPU500-EN, AHXCPU500-RS2, AHXCPU510-EN, AHXCPU530-EN

CPU units, Model(s): AS324 followed by P, T, or MT, followed by -A or any numbers or alphabets, may be followed by blank

CPU units, Model(s): AS332 followed by P, T, or MT, followed by -A or any numbers or alphabets, may be followed by blank

CPU units, Model(s): CPU unit, Model AS Model AS, followed by 3, followed by 00, followed by N, followed by -A or any numbers or alphabets, maybe followed by 2 or blank

CPU units, Model(s): CPU Unit, Model AS Model AS, followed by 3, followed by 20, followed by P or T, followed by -B or any numbers or alphabets, maybe followed by 2 or blank

CPU units, Model(s): Model AS Model AS, followed by 2, followed by 28, followed by R, T, or P, followed by -A or any numbers or alphabets, maybe followed by 2 or blank

Digital IO Unit, Model(s): AS04SIL-A

Digital IO units, Model(s): AH followed by 08, 16, 32, 64, followed by A thru Z or 0 thru 9, followed by M, N, P, R, followed by 00 thruh 99, followed by R, T, P, S, X, N, followed by A thru Z or 0 thru 9, followed by A, B, C.*

Digital IO units, Model(s): Model AS followed by 08, 16, 32, 64, followed by A, followed by M, N, or P, followed by 0 or 1, followed by 0, 1, or 2, followed by N, R, T or P, followed by -A or any numbers or alphabets, maybe followed by blank.

EtherCAT Slave remote I/O modules, Model(s): R1-EC5500D0, R1-EC5500D1, R1-EC5621D0, R1-EC5621D1, R1-EC7062D0, R1-EC7062D1, R1-EC8124D0, R1-EC8124D1, R1-EC9144D0, R1-EC9144D1

EtherCAT Slave remote I/O modules, Model(s): R1-EC60x2D0, R1-EC60y2D1 (x=0, 1, 2 or 3), (y=0 or 2)

Expansion I/O units, Model(s): DVP01HC-H*, DVP01PU-H*, DVP02HC-H*, DVP06XA-H*

Expansion I/O units, Model(s): DVP followed by 02, 04 or 06 followed by AD, DA, TC, XA or PT, followed by E2.* (Rated 24V dc.)

Expansion I/O units, Model(s): DVP followed by 08, 14, 16, 24 or 32 followed by XM, XN or XP, may be followed by 2, followed by 00, 01 or 11, followed by R, N or T.*

Expansion I/O units, Model(s): DVPX where X may be any alphanumeric, followed by 08, 16, 32 or 48, followed by HN, HM or HP, followed by 11 or 00, followed by R, T or N.*

Expansion modules, Model(s): ADP485-01*, DOP-EXIO14RAE, DOP-EXIO28RAE, DOP-EXLNGJ1AE, DOP-EXLNGJ2AE, DOPEXLNGJ4AE, DOP-EXLNHJ1AE, DOP-EXLNHJ2AE, DOP-EXLNHJ4AE, DOP-EXLNTJ1AE, DOP-EXLNTJ2AE, DOPEXLNTJ4AE, DVP01AD-S, DVP01DA-S, DVP01LC-SL*, DVP01PT-S, DVP01PU-S, DVP02LC-SL*, DVP04PT-S, DVP04PU-S, DVP04TC-S*, DVP06PU-S, DVP06SN11N*, DVP06SN11R*, DVP06ST11N*, DVP06ST11R*, DVP06XA, DVP08RT-S*, DVP08SM10N*, DVP08SM11N*, DVP08SN11N*, DVP08SN11R*, DVP08SN11R*, DVP08SN11T*, DVP08SP11R*, DVP08SP11T*, DVP08ST11N*, DVP08ST11R*, DVP10RC-E2*, DVP16SM11N*, DVP16SN11T*, DVP16SP11R*, DVP16SP11T*, DVP16SP11TS*, DVP20LC-SL*, DVP32SM11N*, DVP32SN11TN*, DVPDNET-SL*, DVPDT01-S*, DVPPF01-S*, DVPX16SM11N, DVPX16SN11T, DVPX16SP11T, ELC-EX08NNAN

Expansion modules, Model(s): DVP02DA followed by -S, or -S2, may be folllowed by additional suffixes or blank.

Expansion modules, Model(s): DVP04AD followed by -S, or -S2, may be folllowed by additional suffixes or blank.

Expansion modules, Model(s): DVP04DA followed by -S, or -S2, may be folllowed by additional suffixes or blank

Expansion modules, Model(s): DVP06AD followed by -S, or -S2, may be folllowed by additional suffixes or blank.

Expansion modules, Model(s): DVP06DA followed by -S, or -S2, may be folllowed by additional suffixes or blank.

Expansion modules, Model(s): DVP06PT followed by -S, or -S2, may be folllowed by additional suffixes or blank.

Expansion units, Model(s): DVP04AD-SL, DVP04DA-SL

Extension Accessory Device, Model(s): NC-CAB-DMC*** * is number and # is alphabet or blank

Extension Accessory Device, Model(s): NC-EIO-ADC** * is number and # is alphabet or blank

Extension Accessory Device, Model(s): NC-EIO-DAC** * is number and # is alphabet or blank

Extension Accessory Device, Model(s): NC-EIO-R****# * is number and # is alphabet or blank

Extension Accessory Device, Model(s): NC-EIO-T****# * is number and # is alphabet or blank

Extension Accessory Device, Model(s): NC-EIO-TAD** * is number and # is alphabet or blank

Extension Accessory Device, Model(s): NC-EXM-M** * is number and # is alphabet or blank

Extension Accessory Device, Model(s): NC-EXM-S** * is number and # is alphabet or blank

Extension Accessory Device, Model(s): NC-PAN-***AM-P# * is number and # is alphabet or blank

Extension Accessory Device, Model(s): NC-TBM-P**** * is number and # is alphabet or blank

Extension Accessory Device, Model(s): NC-TBM-R****# * is number and # is alphabet or blank

Extension Accessory Device, Model(s): NC-TBM-T**** * is number and # is alphabet or blank

Hand-held programmers, Model(s): DVPHPP0*

Human Machine Interface, Model(s): DOP-103BQ, DOP-103BQZ0, DOP-103DQ, DOP-103SQ, DOP-103SQZ0, DOP-103WQ, DOP-103WQZ0, DOP-107PV, DOP-107WVCS, DOP-110DS, DOP-110WS, DOP-110WSY0, DOP-3S07S3E2, DOP-3S10S3E2, DOP-B07SS411, DOP-BX03E211, DOP-BX03S210, DOP-BX03S211, DOP-BX07E415, DOP-BX07E515, DOP-BX07PS415, DOP-BX07PS515, DOP-BX07S401K, DOP-BX07S411, DOP-BX07S415, DOP-BX07S515, DOP-BX08E515, DOP-BX08S515, DOP-BX10E515, DOP-BX10E615, DOP-BX10PE515, DOP-BX10S411, DOP-BX10S511, DOP-BX10S615, DOP-BX10VS511, Model DOP-107WV, and Model DOP-107WVZ0, Model DOP-B07S410

Human Machine Interface, Model(s): DAM Series followed by 0 thru 9, followed by 00 thru 99, followed by A~Z, Followed by D, Followed by MP-C or MP-D

Human Machine Interface, Model(s): DOP Series DOP-107EG, DOP-107BG, DOP-107BV, DOP-107EV, DOP-107CV, DOP-110CS

Human Machine Interface, Model(s): DOP-103DQZx (where 0 = number, could be 0 thru 9)

Human Machine Interface, Model(s): DOP-105CQ, DOP-107DV, DOP-107IV, DOP-108IG, DOP-110IS, DOP-110IG, DOP-110CG

Human Machine Interface, Model(s): DOP-112WX, DOP-112MX, DOP-115WX, DOP-115MX

Human Machine Interface, Model(s): DXMC-1FA1RN-70 and DXMC-1FA2RN-70 (both followed by suffix F, A, S or D)

Human Machine Interface, Model(s): MP1-P10D-15 series followed by 0 or 1, followed by 0 ~ 6, or A or B, follow by A to Z(D=Delta version), followed by 0~9 or A~Z

Human machine interfaces, Model(s): DOP-B03E210*, DOP-B03S210*, DOP-B05S111

Human machine interfaces, Model(s): DOP-B03E211* * = may be followed by additional suffixes.

Human machine interfaces, Model(s): DOP-B03S211* * = may be followed by additional suffixes.

Human machine interfaces, Model(s): DOP-B07 may be followed by P or V, followed by S or E, followed by 401, 41x, 411, 415, 511, 515 or 615.*

Human machine interfaces, Model(s): DOP-B08 may be followed by P or V, followed by S or E, followed by 401, 41x, 411, 415, 511, 515 or 615.*

Human machine interfaces, Model(s): DOP-B10 may be followed by P or V, followed by S or E, followed by 401, 41x, 411, 415, 511, 515 or 615.*

Human machine interfaces, Model(s): DOP-BX05S111, DOP-BX07S401K and DOP-BX07E411

Human machine interfaces, Model(s): DOP-W105 may be followed by additional suffixes

Human machine interfaces, Model(s): DOP-W127 may be followed by additional suffixes

Human machine interfaces, Model(s): DOP-W157 may be followed by additional suffixes

Human machine interfaces, Model(s): HMC, followed by 08 or 07, followed by -, followed by A thru Z, followed by 0 thru 9, followed by 00 thru 99, followed by S or H, followed by 0 thru 6, followed by 0 thru 6.

Industrial Ethernet Switch, Model(s): DVS-008W00-M12, DVS-G008W01, DVS-G008W01-KR

Industrial Ethernet Switch, Model(s): DVS-109 followed by I or W, followed by 00, 01, or 02, followed by -1GE

Industrial Machine Vision Controller, Model(s): DMV1000-GE2-VL, DMV1000-GE2-VLM, DMV3000-GE2-VL and DMV3000-GE2-VLM

Industrial Network Equipment, Model(s): DVS-G002I00C-TF, DVS-G928W01, IFD8540

IO Unit, Model(s): AHX05PM-5A, AHX10COPM-5A, AHX10DNET-5A, AHX10EN-5A, AHX10PM-5A., AHX10SCM-5A, AHX16AM10N-5A, AHX16AN01R-5A, AHX32AM10N-5A, AHX32AN02T-5A, AHX64AM10N-5C, AHXBP06M1-5A, AHXBP08M1-5A, AHXRTU-DNET-5A

Open Type, Industrial Ethernet Switch, Model(s): DVW-W02W2-E2-XX where XX can be any alphanumeric character or blank for marketing purpose.

Open type, Programmable controllers, Model(s): DVS followed by G005I, G008I, 008I, 110W02,108W02 followed by any alphabets, numbers or blank.

Open type, Programmable controllers, Model(s): R1-EC5512D0, R1-EC70A2D0, R1-EC70F2D0, R1-EC70E2D0, R1-EC70A2D1, R1-EC70F2D1, R1-EC70E2D1

Open type, Programmable controllers, "AH Series", Model(s): AH followed by CPU, followed by 500, 501, 510, 511, 520, 521, 530, and 531 followed by RS, EN, followed by numbers, alphabets or blank.

Open type, Programmable controllers, "DVP SERIES", Model(s): DVP201LC-SL*, DVP202LC-SL *, DVP211LC-SL *

Open-type, Compact Vision System, Model(s): DMV2000-CL4-HSM and DMV2000-CL2-HSM

Open-type, Compact Vision System, Model(s): Model DMV2000-CL4-HS, and DMV2000-CL2-HS

Panel PC, Model(s): TP70P-16TP1R, TP70P-16TP1T, TP70P-211LC1T, TP70P-21EX1R, TP70P-21EX1T, TP70P-22XA1R, TP70P-22XA1T, TP70P-32TP1R, TP70P-32TP1T, TP70P-RM0, TP70P-RM1, TP70P-RM2

Power Module, Model(s): Model AHXPS05-5A

Power modules, Model(s): AHPS05*, AHPS15*, DVPPS01, DVPPS02

Power supply modules, Model(s): DPR20A, DPS024-24V43, DVPPS02, DVPPS05

Pressure sensors, Model(s): DPA01*, DPA10*

Programmable Automation Controller, Model(s): CMC-MH2P01-003, Model MH1-C50 Series, NC10EB, NC10EB100, NC10EB200

Programmable Automation Controller, Model(s): AX-8yyEP0XYZW Series where y= 0-9 or A-Z, X=A-Z, Y=A-Z, Z=0-9 and W=T or P

Programmable Automation Controller, Model(s): NC30E, NC30EH, NC30EB, and NC30EBH maybe follow by 100, 200, 300, 400, 500, 600

Programmable Automation Controller, Model(s): R2-EC0004, R2-EC1004, and R2-EC2004 ,may be followed by D0 to D9 or blank

Programmable Controllers, Model(s): AHBP04MR1-5A, AHBP06ER1-5A, AHBP06MR1-5A, AHBP08ER1-5A, AHBP08MR1-5A, AHCPU560-EN2, AS02ADH-A, AS524C-B, AS516E-B, DVP02PU-E2, DVP02PU-SL, DVP08NTC-S, DVP15MC11T, DVP15MC11T-06, DVP50MC11T-06, DVP32ES311T, DVP50MC11T, DVPX28SV11T2, Model DVP14SA211TF and DVP16SP11TF, RTU-CN01, TP04P-20EXL1T

Programmable Controllers, Model(s): AS5YYZSW-B Series where YY can be 08, 16, 24, 32, 40, 48, 56, 64, 1H or 2H, where Z can be E or C, where S can be blank, where W can be T or blank

Programmable Controllers, Model(s): CMC-EC0004, CMC-EC1004, and CMC-EC2004 ,may be followed by -001 to -009

Programmable Controllers, Model(s): CPU Unit Model AS, followed by 2, followed by 18, followed by RX, TX, or PX, followed by -A or any numbers or alphabets, maybe followed by 2 or blank.

Programmable Controllers, Model(s): DVP02 may be followed by TKR-S, TKN-S, TKL-S, TUR-S, TUN-S, TUL-S, UHL-S, KHL-S

Programmable Controllers, Model(s): DVPxyz Series where x can be 20 or 28, and y can be SV3 or SX3, and z can be 11T, 11R or 11S

Programmable Controllers, Model(s): MH2-P10N-RXYDZ Series (N=N or E. R=N or P.X=0.Y=A~Z, 0~9. D=A~Z, 0~9.Z= A~Z, 0~9)

Programmable Controllers, Model(s): R2-EC0014 and R2-EC2014 may be followed by D0 to D9 or blank

Programmable Controllers, "AS series", Model(s): Model AS , followed by 02, 04 followed by PU, followed by -A

Programmable human machine interfaces, Model(s): DOP-A10TCTD, DOP-A10THTD1, DOP-A75CSTD, DOP-AE10THTD, DOP-AE10THTD1, DOP-AE80THTD, DOP-AE80THTD0, DOP-AS35THTD, DOP-AS38BSTD, DOP-AS38BSTD-W, DOP-AS57BSTD, DOP-B05S100, DOP-B05S101, DOP-B07E411, DOP-B07S200, DOP-B07S201, DOP-B07S201A, DOP-B07S211, DOP-B07S410, DOP-B07S411K, DOP-BX07S410, TP04G-AL-C, TP04G-BL-C

Programmable human machine interfaces, Model(s): DOP followed by -A or -AE, followed by 57, followed by G, C or B, followed by STD, may be followed by -W.

Programmable human machine interfaces, Model(s): DOP-NP3 followed by -MQ, followed by 0 thru 9, followed by 0 or 1, followed by 0 or 1, may be followed by B.

Programmable human machine interfaces, Model(s): DOP-NP5 followed by -MQ or -SQ, followed by 0 thru 9, followed by 0 or 1, followed by 0 or 1, may be followed by B.

Programmable human machine interfaces, Model(s): TP followed by 02, 04, 05 or 08 followed by T or G, followed by A or B, followed by S, followed by 1 or 2

Programmable human machine interfaces, Model(s): TP04P followed by 00 thru 32, followed by TP, EX or XA, followed by 0-9, followed by R or T, followed by additional alphanumeric letters or blank

Programmable Logic Controller, Model(s): AX-332EP0MB1P, AX-332EP0MB1T, AX-864E30CE2T, AX-864E30ME2T, AX-8H1E30CD2T, AX-8H1E30CE2T, AX-8H1E30ME2T

Programmable Logic Controller, Model(s): AX-CxxEB0MD1T Series ,where xx can be 06 or 12

Programmable Logic Controller modules, Model(s): AS16AM10N-B, AS16AN01P-B, AS16AN01T-B, AS32AM10N-B, AS32AN02T-B

Programmable logic controllers, Model(s): DVP followed by 10 thru 60, followed by EC, followed by 00, followed by R or T.*

Programmable Logical Controller, Model(s): ASRTU-EC02SSNA, ASRTU-EC16AP1TA, ASRTU-EC16AP1PA, DVP28EX300MT, R2-EC0902D0

Programmable Logical Controller, Model(s): AS1XY series where X can be 32, 48 or 64, and Y can be T-A, R-A or P-A

Programmable Logical Controller, Model(s): AX-3YYZA0SW Series where YY can be 00, 04, 08, 16, 24 or 64, where Z can be E, N or EL, where S can be MA1 or PA1, where W can be T or P

Programmable Logical Controller, Model(s): DVPaEX3b series where a can be 22 or 36, b can be 00R or 00T

Programmable Logical Controller55, Model(s): DVP32ES300TEC

Programmable Logical Controller55, Model(s): DVPXES3Y series where X can be 32, 48, 64 or 80 and Y can be 00R or 00T

Remote IO Communication Module, Model(s): RTU-ECAT

Switching power supply module, Model(s): AS-PS02 and AS-PS02A

T, Model(s): DVP06PT-E2

Various & communication IO units, Model(s): AHRTUCOPM*, AHRTUDNET*, AHRTUETHN*, AHRTUPFBS*

Various & communication IO units, Model(s): AH followed by 01 thru 30 followed by PT, PTG, TC, HC, PM, MC, EN, SCM, DNET, PFBM, PFBS, EIP. COPM, and EMC, followed by numbers, alphabets or blank. Model AH, followed by RTU, followed by COPM, DNET, ETHN, PFBS, followed by numbers, alphabets or blank

Various & communication IO units, Model(s): AS00SCM followed by -A or any numbers or alphabets, may be followed by blank

Various & communication IO units, Model(s): ASXXYYYY-Z, maybe followed by blank. XX represents 00 or 01, YYYY represents SCM, DNET, Z represents A or any numbers or alphabets.

* - May be followed by additional suffixes or blank.
*

Last Updated on 2024/6/26 下午 09:32:00

在此資料庫中出現的公司名稱或產品，並不代表其產品本身的製造有經過UL 後續檢驗服務的把關。僅有附 UL 標誌的產品才可被視為取得認證，並涵蓋在UL 後續檢驗服務範疇裡。請務必確認產品上是否有此標誌。

UL 允許複製線上認證目錄中所包含的資料，但必須符合以下條件：1.指南資訊、零組件、構造、設計、系統和/或認證 (檔案) 必須以完整的方式呈現，且不得誤導、不得操弄這些資料 (或圖繪) 。2.「經 UL 許可自線上認證目錄轉載」的聲明，必須顯示在擷取的資料旁。此外，轉載的資料必須包含以下格式的版權聲明： "©2024 UL LLC."